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AIR FORCE MENTORING: THE
MENTOR'S PERSPECTIVE
THESIS

Francis Lewandowski
Captain, USAF

AFIT/GLM/LSM/85S-45

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AIR FORCE MENTORING:
THE MENTOR'S PERSPECTIVE

THESIS

Presented to the Faculty of the School of Systems and Logistics
of the Air Force Institute of Technology
Air University
In Partial Fulfillment of the
Requirements for the Degree of
Master of Science in Logistics Management

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Abstract

Mentoring is defined as a relationship between a senior member and a junior member of an organization in which the senior member is influential in molding and shaping the career of the younger member. Recent articles have focused on conceptualizing the mentoring phenomenon and examining how it effects the individual and the organization.

This project found that nearly two-thirds (61.1 percent) of those surveyed (112 Air War College designees) reported having been involved in a mentor-protége relationship at some point in their career. While this research found that individuals who had mentors were no more likely to be promoted ahead of their unmentored counterparts, it did conclude that officers assuming the role of mentor were significantly more satisfied with their job than those who had not assumed the mentoring role. Additionally, proteges perceive their mentors as having significant influence on their careers.

The most important roles played by the mentor, from the protege's perspective, are those of role model and sponsor. On the other hand, the most important roles played by the mentor, in the eyes of the mentor, are those of advisor and teacher. Still others, who did not have a

mentor, perceived the mentoring process in negative terms whereby "undeserving" officers who are sponsored or protected by a mentor received choice assignments over more deserving candidates.

In summary, Air Force and private sector mentoring work in much the same way. Mentoring accelerates the learning of the technical, human, conceptual, and diagnostic skills required of today's junior officers through interpersonal relationships with more experienced senior managers.

AIR FORCE MENTORING: THE MENTOR'S PERSPECTIVE

I. Introduction

The concept of mentoring has recently received considerable attention throughout the field of management. Six or seven years ago there were few, if any, articles written on the topic. Today, trade journals abound with articles ranging from cross-gender mentoring to reasons why one should, and should not, enter into a mentoring relationship. In a study by Heidrick and Struggles, Inc., and reported by Roche, nearly two-thirds of the top executives who reported having had a mentor earn more money at a younger age, are better educated, more secure in their jobs and feel better about their work than executives who have not had a mentor (23:15). Roche contends that as the rapid pace of technological change affects the business community, the mentoring process will become even more important in accelerating the learning curve of young executives. With the extreme advances in technology experienced by the Air Force, one would think that this process would also be more beneficial to the junior officer corps.

Andrew Szilagyi states that there are at least three mechanisms that facilitate the acquisition of managerial skills. These are: (1) education, (2) experience, and (3) a mentor relationship (26:25). The Air Force certainly encourages education, and Air Force junior officers, through ever-increasing on-the-job responsibilities, acquire experience rapidly. But what of the third mechanism, the mentor relationship? Does the Air Force provide for an opportunity to quickly learn the technical, human, conceptual and diagnostic skills an experienced manager could lend to such a relationship? According to a recent AFIT thesis, "mentoring is a fact of life in the Air Force just as it is in most large organizations" (27:56).

Current publications citing a decline in the quality of leadership in the junior officer corps (2:50; 24:12-13), justify a more in-depth look at the mentoring concept as a leadership development tool. Unfortunately, articles found in the literature address military mentoring only from a protege's point of view. A more complete picture of the Air Force mentoring process could be gained by researching the topic from the mentor's perspective. In addition, a more accurate correlation and comparison to Roche's survey of industries' top executives can be made.

Before continuing further, perhaps a brief definition of the terms "mentor" and "protege" may be helpful in understanding the concept of mentoring as it applies to

this writing, and to the concept of mentorship in the Air Force.

According to Webster's, a mentor is a close, trusted and experienced counselor or guide, a teacher, tutor, or coach. A protege is defined as someone under the care and protection of an influential person, usually for the furthering of his career. Shapiro places "mentors" at one end of a continuum, with "peer pals" at the other, and describes mentors as the "most intense and paternalistic of the types of patrons" (25:55). For the purpose of this project, mentoring will be defined as a relationship, between a senior member (mentor) and a junior member (protege) of an organization, that lasts two years or longer.

Since the prevalence of mentoring in the officer corps of the Air Force had previously been supported, the thrust of this project was to reexamine the prevalence of mentoring in the Air Force and to investigate the phenomenon from the mentor's perspective. To accomplish this, a sample of high potential officers currently assigned on active duty was surveyed to find out whether they had mentors, whether or not they had assumed the role of mentor, and, in general, to examine their point of view concerning the mentoring process within the Air Force. The survey also attempted to estimate the perceived effect the mentor had on the career of his protege and on the Air

Force as an organization. Captain Michael Uecker's survey (27:60-66) was used as a basis for designing a survey instrument to meet the needs of this particular project.

A review of the current literature on mentorship, as it applies to the civilian sector, as well as a comparison to earlier military studies may further aid in conceptually defining the mentoring process.

II. Literature Review

In an effort to further conceptualize the mentoring process, an examination of the mentoring phenomenon in the private sector is required. Of particular interest is the mentor's perspective as seen by examining characteristics of the mentor, the roles he or she plays in the process, and the effects mentoring has on the mentor. One can then appreciate how mentoring in the Air Force and mentoring in private organizations compare.

The Characteristics of the Mentor

Johnson claims that mentors are the key to development and growth (13:55) and Donald S. Perkins, chief executive officer of Jewel Companies, states that "everyone who succeeds has had a mentor or mentors" (5:100). Bushardt contends that a mentor is the key to higher management for the aspiring young executive (4:46). With such strong support for mentoring, what does one look for in a mentor?

The most common traits that characterize a mentor and differentiate him or her from the protege are age, gender, organizational position, power, and self-confidence (12:480).

Age of the Mentor. Mentors generally are older than their proteges (12:480). Levinson (18) found that

mentors were usually older than their proteges by half a generation, roughly eight to fifteen years. This appears to be the ideal age spread between mentor and protege. Levinson believes that if the age difference is twenty years or greater, the relationship will be more that of a parent-child and would interfere with the mentoring function (18). On this point, Kram (15) states that mentors who are twenty or thirty years older than their proteges may face significant communication or value problems caused by generation differences. Both authors agree that age differences of less than six to eight years are likely to cause the participants to treat each other as peers, thereby minimizing the mentoring aspects. Several studies state that the mentor must be old enough, as a minimum, to have accumulated the experience necessary to benefit the protege.

Gender of the Mentor. A great deal of literature has discussed the topic of gender in the mentor-relationship. Particular focus has been placed upon cross-gender mentoring. Levinson (18) states that proteges need to have mentors of the same sex. Hunt and Michael contend that Levinson's argument is biased because his sample is limited only to men attempting to advance in traditionally male-dominated fields (12:480). There is, however, a lack of female role models or mentors in traditionally

male-dominated career fields, and it is for this reason that career-oriented women seek mentors in much the same way as young adult males (6:82-86; 12:477). One study on the histories of twenty-five successful woman managers found nearly all of them had used men as role models and often credited their male mentors with the encouragement and training they needed to rise to upper management (3:37). Little information exists on female mentor-female protege or female mentor-male protege relationships. However, Kram noted that male mentor-female protege relationships have special complexities. Both mentor and protege must deal with tensions brought about by intimacy and sexual concerns, increased public scrutiny, and collusion in stereotypical male/female roles (15:105). While the male model of mentorship may not be totally applicable for females, and the scarcity of females is apparent in traditionally male-dominated careers, mentors are seen as crucial tools for training and promoting career success for both males and females (23:27).

Power, Organization Position, and Self-Confidence of Mentors. Mentors are often highly placed, powerful, and knowledgeable individuals who are not threatened by the protege's potential for equalling or surpassing them. They are also self-confident professionals who show genuine concern for the needs and development of their

protéges (12:481). Roche's list of seven key characteristics of the mentor focuses on the mentor's position, power, knowledge, and respect, but does not address the characteristics of age or gender that others do. He suggests that protégés look for these characteristics in selecting a mentor. In ranking the characteristics most important for a mentor to have, Roche's respondents gave the highest value to a mentor's "willingness to share knowledge and understanding" (23:29). McClelland and Burnham (19:100-110) found that successful managers are participative in style, exhibit coaching behavior, and have a stronger need for power than do less successful managers. It's interesting to note that one of the needs that the mentor may bring to the relationship is the need for power. Kram (15) found that managers, as mentors of successful protégés, gained status and esteem in the eyes of their peers and superiors. By using past and present protégés, mentors can spread their influence through both the informal and formal networks of an organization. Thus, serving as a mentor may be one way in which an individual can satisfy one's need for power (12:481).

As one can see, numerous authors have attempted to define mentoring by describing specific characteristics that the mentor may possess. Despite this popular approach, the mentoring concept remains difficult to translate into management practice. Others (14:492; 17:33-34; 25:55-56)

contend that mentoring can be best understood by focusing not on mentor characteristics, but on what mentors do, or the roles they assume in the relationship.

The Roles of the Mentor

The roles and functions of the mentor are discussed throughout the literature, each to varying degrees, and each in an attempt to define exactly what a mentor does or is supposed to do. "Even the most recent literature is still struggling to define what a mentor is and does" (7:632).

Shapiro, Haseltine and Rowe place the mentor/protege relationship on a continuum. This overall spectrum they describe as a "patron system." They postulate that within this system, mentors and peer pals serve as end-points on the continuum while sponsors and guides are internal points along the continuum (25:55).

The term peer pals is used to describe the relationship between peers helping each other to succeed and progress by sharing information and strategies, and providing advice for one another. Basically, peer pals help each other while helping themselves.

At the one-third point on the continuum they place guides, and state that these people can be invaluable in explaining the system. Secretaries are placed in this group and their primary functions are to point out pitfalls

to be avoided and shortcuts to take, as well as providing valuable intelligence for their proteges.

Sponsors are placed at the two-thirds point on the continuum. They are strong patrons, but less powerful than mentors in promoting and shaping the careers of their proteges.

Finally, at the upper end of the continuum are the mentors. Shapiro, Haseltine and Rowe define this relationship as the most intense and paternalistic of the types of patrons described by the continuum (25:55-56). They further contend that within the patron system, the mentor-protege relationship tends to be more hierarchical and parental, more intense and exclusionary, more elitist, is restrictive, and comes with strings attached. In the final analysis, however, this type of relationship can result in the greatest boost toward success (25:56). Though they relate the patron system continuum to the upward mobility of the female protege, their definition of mentoring encompasses nearly all of the roles of the mentor discussed further in the literature.

Lea and Liebowitz offer perhaps the most comprehensive and concise listing of roles played by the mentor. They assert that mentorship can best be understood by focusing on what mentors do. Their consolidation of ten behaviors--teaching, guiding, advising, counseling, sponsoring, role modeling, validating, motivating, protecting, and

communicating--form what is generally accepted as the mentoring process (17:33). A more detailed look into each of the roles is necessary to further understand exactly what it is the mentor does.

Teaching--is instruction in the specific skill and knowledge necessary for successful job performance or otherwise assistance in the person's career development.

Guiding--orients the novice to the "unwritten" or informal rules of the organization.

Advising--usually occurs in response to a request by the protege, and differs from advice given by others in its quality.

Counseling--provides emotional support in stressful times and may help to clarify career goals or develop plans of action to achieve those goals.

Sponsoring--provides growth opportunities for the protege. It is not to be confused with a free ride, as what happens once the mentor has opened the door for the protege is largely the protege's responsibility.

Role Modeling--finds the mentor serving as a person whom the protege can emulate. It usually occurs subconsciously as the protege patterns his or her behavior after that of the mentor.

Validating--occurs when the mentor evaluates, modifies and finally endorses the protege's goals or aspirations.

Motivating--provides the encouragement and impetus for the protege to act toward achievement of his or her goals.

Protecting--provides a safe environment where the protege can make mistakes without losing self-confidence. The mentor acts as a buffer for the protege's risk taking. This important function enhances future decision making when the protege is faced with uncertainty.

Communicating--is essential if the other nine mentoring behaviors are to be effective. Expertise means little if it cannot be communicated. (17:33-35)

Klauss' (14:492) examination of mentor relationships in the public sector, particularly the roles of formal mentor-advisor systems in management and executive development programs within the federal government, identifies major roles and responsibilities of the mentor that he places into five areas. These are: career strategy advising, individual development plan counseling, sponsorship/mediating, monitoring and giving feedback, and role modeling. Again, all of these functions can easily compare to the list of mentoring roles proposed by Lea and Liebowitz. For example, giving feedback can fall under the purview of communication. Validating, where the mentor evaluates, modifies, and finally endorses the protege's goals and aspirations (17:34), if one so chooses, may also be considered a form of feedback.

More recently, Kram (16) divides mentoring functions into two broad categories--career functions and psychosocial functions. She contends that career functions are possible because of the senior person's experience, organizational rank, and influence in the organizational context, while psychosocial functions are a result of an interpersonal relationship that promotes trust and even intimacy (16:23).

Career Functions. Kram states that career functions are "those aspects of the relationship that enhance career advancement." These functions include sponsorship, exposure and visibility, coaching, protection, and challenging assignments (16:23-24).

Sponsorship--is actively nominating an individual for desirable lateral moves and promotions.

Exposure and Visibility--assigning responsibilities that allow the junior member to develop relationships with key figures in the organization, who can measure for themselves the junior member's potential.

Coaching--is the senior colleague's suggestions on strategies for accomplishing work objectives, for achieving recognition, and for achieving career aspirations that enhances the junior member's knowledge and understanding of the organization.

Protection--shields the junior member from untimely or potentially damaging contact with other senior officials and can enhance or interfere with future advancement opportunities of the protege.

Challenging Assignments--a job-related function that often places the mentor in the role of teacher because of the technical knowledge and useful feedback provided to the protege. (16:25-32)

The timing of a relationship in each individual's career, as well as the formal role relationship between mentor and protege, influence which career functions will be provided. An arrangement involving direct reporting of the subordinate to the supervisor, for example, may foster coaching or teaching through challenging work assignments, while individuals who are structurally or physically separated in their relationships may place more emphasis on sponsorship (16:32).

Psychosocial Functions. Kram contends that these functions "enhance a sense of competence, identity, and effectiveness in a professional role." These functions include role modeling, acceptance and confirmation, counseling, and friendship (16:32).

Role Modeling--the most frequently reported psychosocial function. Here, a senior colleague's attitudes, values, and behavior provide a model for the junior member to emulate.

Acceptance and Confirmation--is a mutual function whereby both individuals derive a sense of self from the positive regard conveyed by the other. It is supported by the senior member, through acceptance and confirmation, that encourages risk taking by the protege, with little fear of rejection due to failure.

Counseling--enables an individual to explore personal concerns that may interfere with a positive sense of self in the organization.

Friendship--allows the young adult to begin to feel like a peer with a more senior adult and is characterized by a social interaction that results in mutual liking and understanding, and enjoyable, informal exchanges about work and outside work experiences. (16:33-39)

According to Kram, the mentoring functions are the essential characteristics that differentiate developmental relationships from other relationships in the work environment (16:22). The range of mentoring functions or roles that enhance development can vary depending on the needs of both the mentor and protege, the interpersonal skills brought to the relationship, and finally the organizational context which may, or may not, allow opportunities for interaction (16:40).

Hunt and Michael claim that the greatest value of the mentor is in the role of teacher (13:483). Lea and Liebowitz expand on this idea by stating that the mentor in the role of teacher does not teach the protege his or her job, but the skills necessary for successful job performance (17:33). Hunt and Michael conclude that talented proteges can be identified, mentors located and matched with them, and that "both organizations and individuals can benefit from on-the-job mentorship training of talented male and female proteges" (12:484).

Regardless of the roles assumed by the mentor, the mentoring relationship can produce immediate and long-lasting benefits, or can result in damaging effects for all concerned. An awareness of the effects of the mentoring process on the mentor can aid in his or her decision to acquire a protege.

The Effects of Mentoring on the Mentor

The effects of mentoring on the mentor may be positive or negative. This section examines those aspects of the mentoring process that may be beneficial or harmful to the mentor.

Positive Effects. The supervisor or manager, who is a mentor, enjoys the satisfaction that they have helped another work towards his or her goals (10:36). Mentors

also experience a feeling of self-importance from respect given by the protege and interest shown in the mentor's stories of past successes. For many mentors, the treatment of his or her advice as guidelines or principles, or role modeling, are enough to warrant continuing a relationship that can lead to lasting friendship (10:37).

Reich's study found that "mentors (75-90 percent) highly valued being able to keep high flyers on their team and thus improve group performance." Another positive, but less tangible effect reported by most respondents was that basically they "felt good about furthering the careers of talented young employees" (22:44). Many mentors express a sense of responsibility for "putting back into life what you get out." Some find satisfaction in being role models, while others simply have the strong desire to develop talent (9:58). To be sure, there are many reasons why one assumes the role of mentor. On the more practical side, a mentor may enlist the aid of a protege to help get things done and thereby free up his or her own time for more important tasks (4:49).

Levinson (18) believes that serving as a mentor provides a creative and rejuvenating life challenge to an adult. Along these same lines, Erikson (8) states that in the seventh stage of the life cycle, adulthood (approximately 35-65), one feels the need to leave something of lasting value, to help guide and establish the next

generation, or to leave one's mark on the world (7:633; 8). Erikson uses the term "generativity" to describe this yearning. The fulfilling of this need, through the mentoring process, is one way in which a mentor can combat the feeling of stagnation and decline that can often develop during mid-career stress. Thus, "being a mentor can be seen as a vital activity of mature leaders--healthy not only for the organization, but for the mentor as well" (7:634).

Negative Effects. The mentor relationship is not without dangers. If abused or misused, it can adversely effect the mentor. There is always the chance that a mentor or protege may become influenced by emotions rather than facts. Blinded by emotions, the mentor may believe the subordinate when the individual attributes his or her poor performance to personal problems, when in fact the subordinate's record indicates continuous job performance problems. Halatin and Knotts provide the following potential hazards of mentorship: employee jealousy, time demands (on the mentor), image attractiveness, overdependency, prohibitive domain, blackmail, embarrassment, loyalty (discarded), emotional involvement and sexual involvement (11:27-29). Particularly in cross-gender relationships, the risks taken by the mentor may have devastating consequences should the relationship become so close as to cause

sexual tension and rumors of liaisons (9:60). Poor performance by a protege may also reflect negatively on the mentor (12:479). Halatin and Knotts also assert that a mentor can avoid many of the pitfalls by "prudent analysis of the potential outcomes." They suggest, first, that one look at what is expected to be gained from the relationship, or what the opportunity cost is to the mentor. Next, evaluate the protege in terms of potential for success and, finally, perform an analysis of the entire situation. The mentor must assume responsibility for concept development and accountability for the outcome of the relationship (11:29).

As we have seen from a review of the literature, a young person learns a trade best when studying with a master. In the civilian sector, the importance of the mentor relationship for a young person's development has been well documented (23:14). How does mentoring in the Air Force compare to the mentoring process found in most civilian organizations? The next section attempts to answer this question.

Air Force Mentoring

Every article reviewed recognizes mentorship as a critical training and development tool for the career success of both men and women. Each suggests that

organizations and individuals can benefit from on-the-job mentorship training of talented proteges.

Some wing commanders in the Air Force institute what is called a "shadow program." This is an opportunity for junior officers to accompany the wing commander for a day and witness the management style he uses to run his wing. While this could possibly lead to the first step in establishing a potential mentor relationship, it falls far short of the mentoring concept described in the literature.

There is very little literature relating the mentoring phenomenon to the military. Only recently has the existence of the mentoring process in the Air Force been empirically substantiated (27:36).

The perspective that the U.S. Army has on mentoring appears to be much healthier than that of the Air Force. In February, 1984, the Army Chief of Staff determined that a study to examine officer development would be most useful in assessing the effectiveness of Army leadership. This gave rise to the Professional Development of Officers Study (PDOS). The PDOS used two separate surveys to assist in the study of officer development. The first questionnaire was mailed to 23,000 randomly selected officers (lieutenant through colonel) and the second was mailed to 436 serving general officers and promotable colonels. The PDOS survey data indicated that the overwhelming

majority (88 percent) of the respondents (lieutenant through general) believe that officers should assume the role of mentor, and 96 percent stated that the degree to which commanders develop the officers serving under them should be a main factor in that commander's evaluation. General officer respondents strongly support the officer assuming the mentorship role. Their comments indicate that many general officers view development of subordinates as a critical factor in the mission accomplishment, and that development of subordinates during peacetime is the key to successful mission accomplishment during combat. The Army's position on mentoring is that,

Army leaders, regardless of age, or grade, are expected to use a mentorship approach to leading and developing subordinates. The unique responsibilities associated with military officers leading soldiers in battle provide them with a particular base of influence which contributes to both the ability and the need to use such a style of leadership. (1:4-8)

In short, the Army supports the mentoring process openly and wholeheartedly.

Unfortunately, in the Air Force, the term mentor conjures up negative implications, particularly by those individuals who do not have a mentor relationship established. "Brown-noser" seems to be the most prevalent term applied to those individuals who have a sponsor, or who exhibit a "closer-than-working" relationship with a superior. This is understandable should one consider a mentor only in the role of sponsor or protector. Mentor

relationships involve much more, however, and a recurring theme throughout the literature is that mentors play vital roles in teaching, guiding, advising, counseling, motivating, and communicating, as well as sponsoring and protecting.

Mentoring exists in the Air Force just as it does in most large organizations (27:56). Captain Uecker, in his survey of Air Command and Staff (ACSC) and Air War College (AWC) students, found that 42.2 percent reported having a mentor (27:36). This compares favorably to the Army's response of 41 percent for those respondents who reported currently having a mentor (1:8). Though Uecker's figure of 42.2 percent was not as prevalent as the 63.5 percent observed by Roche for business executives, one must realize that the officers surveyed by Uecker were not yet at the pinnacle of their careers as many of the executives were. Furthermore, of the younger ACSC students, only 38.5 percent reported having a mentor while 47.6 percent of the more senior AWC students reported having a mentor. This would seem to support the increased influence of mentors as one climbs higher up the organizational ladder (7:632; 27:45).

Captain Uecker's study paralleled Roche's findings with regard to the following statistically significant results:

--Highest educational level attained was a significant discriminator between mentored and unmentored officers, with mentored officers having more education.

--Mentored officers were more likely than their unmentored counterparts to have formulated a career plan.

--Mentored officers were more satisfied with their work and with their career progress than unmentored officers.

--Mentored officers were more likely than unmentored officers to have received at least one early promotion. (7:632; 27:36-44)

Officers in Uecker's study most often chose "role model" as the primary role of their mentor (27:44). This is in line with Kram's (16) assertion that role modeling is the most frequently reported psychosocial function (16:33). In fact, all the roles defined by Lea and Liebowitz (17:33-34) were roles played by Air Force mentors at one point or another (27:43), and compared favorably to the roles played by mentors in the private sector.

Finally a discriminant analysis revealed that the mentored officer places significantly more value on mentoring as a leadership development tool than his unmentored counterpart (7:633; 27:42).

Summary

Informal mentoring systems exist in most corporations and are effective in developing talented, young managers. When considering the negative aspects of the mentoring process, it would do well for companies to remember that most individuals are not motivated by a need for

power, but by a need to learn and expand their abilities (22:46).

Organizations need to make senior managers aware of the benefits on both sides of mentoring and encourage the selection of proteges for future leadership development.

The one basic problem the Air Force has is that the mentoring phenomenon simply has not been publicized for what it really is; an important training and development tool for upward progression of professional individuals that exhibit high potential. An awareness of what constitutes mentoring could allow many senior officers to consciously utilize their experience and knowledge to more fully develop leadership traits in junior officers.

In summary, "mentoring in the Air Force follows the successful pattern of mentoring in the private organization" (27:59). The bottom line, as each author points out, is that there can be pitfalls in a mentor-protege relationship, and that alertness to the development of a problem situation is important. However, as in private industry, mentor relationships can provide benefits to the mentor, protege, and the Air Force that far outweigh the time or effort required to establish and continue the relationship.

Research Hypotheses

In order to parallel, as closely as possible, Roche's survey of industry's top executives, the following hypotheses have been formulated on the assumption that mentoring is a process that is common throughout the Air Force officer corps. An earlier study by Captain Michael Uecker compared the prevalence of the mentoring phenomenon in the Air Force with Roche's private sector study (27:28,106). Unfortunately, Captain Uecker was not able to survey senior officers in positions truly similar to the executives surveyed in Roche's study. As stated earlier, Uecker surveyed both ACSC and AWC students. Only AWC students were surveyed for this study since these high potential officers are more senior than the ACSC students and thereby more comparable to the executives surveyed by Roche. The roles and effects of mentoring alluded to in the literature form the basis for examining mentoring in the Air Force officer corps and for comparing the data to both the private sector and Uecker's previous results for the Air Force.

Each hypothesis will be stated in the null hypothesis form to allow for appropriate statistical testing. The first hypothesis proposes that:

- H1: The mentoring phenomenon, as defined in the introduction of this text, is as prevalent in the Air Force as it is in private industry (63.5 percent).

An interesting concept is that mentoring is likely to be more associated with one particular command than another, and that one's career formulation has played a significant role in attaining one's position of mentorship. To evaluate this concept, the second hypothesis states:

H2: All officers, regardless of military background, are equally likely to have a mentor.

To support the second hypothesis, areas examined include whether the respondent had formulated a career plan which he or she had endeavored to follow over the years, and which command, if any, the respondent most closely identified with. In order to parallel Uecker's study for a more accurate comparison, these factors were again chosen as the best possible discriminators between mentored and unmentored officers in determining the effects of one's military background on the mentoring process in the Air Force.

Hypothesis 3 examines whether mentored officers are more likely to receive "below-the-promotion-zone" (BPZ) promotions than their unmentored counterparts. Since a BZ promotion in the military equates to an increase in pay, this correlates to Roche's assertion that executives who had acquired a mentor earn more money at a younger age than their unmentored counterparts (23:15). Uecker (27:110) concludes that mentored officers are more likely to be promoted earlier than unmentored officers and

a reexamination of this aspect of the mentoring process is desired. Thus, the null hypothesis is:

H3: Mentored officers are no more likely to be promoted early than unmentored officers.

To gain insight into the perceptions of the senior officer both as a protege and a mentor, and to the roles played by the mentor in each situation, the next hypothesis is:

H4: None of the roles of the mentor, as enumerated by Lea and Liebowitz, are functions used by mentors in the Air Force.

A rejection of the null hypothesis for any role would indicate that role was played by a significant number of mentors of the Air Force officers. A comparison can be made as to how the senior officer perceived the roles played by his mentor to the roles he now plays in the mentoring relationship. This was accomplished by asking the same question from both the protege's point of view and then from the mentor's perspective.

Another area of primary interest is the mentor's perspective of the effects of mentoring on a protege or protege's career, as well as the perceived effect a mentor has had on one's own career. Roche's survey measures influence from the protege's viewpoint, but also includes comparisons between executives who have had a mentor and now have proteges and those who have had a mentor but no protege (23:20). To measure the degree of influence

Air Force mentors perceive themselves having an influence on their proteges, or their protege's career, the next hypothesis states that:

H5: Mentored officers perceive that being mentored had no more influence on their own careers than they, as mentors, have on the career of their protege.

Uecker found that officers who had been proteges, were likely to be more satisfied with their job than those who had not been proteges (27:111). Likewise, Roche (23:28) found evidence to suggest that the executive who had a mentor was likely to be more satisfied with his work than the executives who did not have a mentor. With the amount of literature supporting the theory that mentors experience positive effects, in terms of job satisfaction, from the mentoring relationship (9:58; 10:37; 7:632), the last hypothesis examines the job satisfaction factor from the mentor's point of view. The null hypothesis states:

H6: Officers who are mentors are likely to be no more satisfied with their job than those who are not mentors.

Again, rejection of the null hypothesis would indicate that officers in the role of mentor derive greater satisfaction from their jobs than those that are not mentors.

III. Methodology

This chapter describes the approach and techniques used to test the hypotheses that were stated in Chapter II. The population of concern and the survey instrument used to collect the data are discussed and each hypothesis is restated and examined in terms of measurement, decision rules and appropriate statistical techniques applied. The collected data was analyzed using the Statistical Package for Social Sciences (SPSS) that is on the Harris computer system at the Air Force Institute of Technology. Sources used for support of each statistic and decision rule were Meek and Turner's Statistical Analysis for Business Decisions (21) and McNichols' Applied Multivariate Data Analysis (20).

Population of Concern

The sample for this study needed to be drawn from a population of Air Force officers senior enough to have had the opportunity to be mentors as well as to have had mentors. Gerald Roche surveyed top executives mentioned in the "Who's News" column of the Wall Street Journal in 1977 (23:14). His population included chairmen and presidents of listed and actively traded unlisted companies and private-held companies in which volume in sales was at

least \$100 million (23:28). Unfortunately, Air Force policy precludes sending questionnaires to general officers who would most closely parallel Roche's sample (27:24-25). Permission to survey wing and base commanders, a population also fairly comparable to Roche's, was also denied; however, authorization to survey designees for the next class of AWC was granted. Since attendance at AWC is based on potential for advancement, the 112 Air Force colonels and lieutenant colonels designated to attend have already been selected as having high potential for further advancement and therefore compare favorably with the population surveyed by Roche. Furthermore, it is parallel to part of the sample used in Uecker's recent thesis effort.

Survey Instrument

A survey questionnaire (Appendix A) was used to collect the data to test the six hypotheses stated earlier. The proposed questionnaire had been pretested for clarity and was previously used in the same form to survey officers attending AWC and ACSC (27:25; 34). Captain Uecker gave permission to use the questionnaire he developed for the purpose of examining the mentoring phenomenon in the military from the mentor's point of view. Minor changes were made to "tailor" the questionnaire to the population of concern to obtain data from the perspective of the mentor.

Experimental Design

Since the existence of mentoring within the officer corps of the Air Force has been empirically supported (27:36), a reexamination of the prevalence of mentoring was desired. In Roche's survey, nearly two-thirds (63.5 percent) of the respondents reported having had a mentor or sponsor. Additionally, one-third reported having two or more mentors (23:14). Uecker's survey of high potential Air Force officers, students attending AWC and ACSC, classified 42.2 percent of the respondents as having had mentors at one point in their career (27:36). The first hypothesis reexamines the prevalence of mentoring from the mentor's perspective and is supported by data collected from questions 1 and 5.

H1: The mentoring phenomenon, as defined in the introduction of this text, is as prevalent in the Air Force as it is in private industry (63.5 percent).

Q1: At any stage in your career, have you had a mentor/protégé relationship with a person who took a personal interest in your career and who guided you or helped mold your career?

- a. Yes
- b. No

Q5: How much influence has your mentor exerted over you?

- a. Extraordinary influence
- b. Substantial influence
- c. Moderate influence
- d. Little influence
- e. No influence

Question 1 was asked to determine the prevalence of mentoring in the officer corps. To ensure, however, that the respondent is defining the terms "mentor" and "protege" in the same light as the researcher, question 5 asks for a more in-depth response to confirm that the relationship was actually one of mentor/protege. In order to remain consistent with the Roche survey, if the respondent answered question 5 with a "less than moderate influence" response, then it is presumed that the relationship is something other than the mentor relationship described by Roche (23:20).

Questions 1 and 5 were restated (Q19 and Q22) to validate the prevalence of current mentors among the respondents. Questions 19 and 22 ensured that those who reported currently serving in a mentor capacity were actually doing so as described by Roche (23:20). Statistical tests were the same used for questions 1 and 5.

It is assumed, for this research, that the time criteria (2-5 years) used to further define the mentor/protege relationship is not an accurate measure by which to confirm existence or nonexistence of a relationship when applied to military members. While the relationship may meet the time constraints imposed by previous researchers (via a continuing relationship over the telephone, for example), it was not deemed appropriate in light of the mobility of today's officer corps, to enter as a factor in

determining whether or not a mentor relationship existed. Once one determines which officers are mentors, then the proper test statistics and decision rules can be applied and the first hypothesis can be mathematically stated as:

$$H_{1n}: P(\text{yes}) = 63.5\%$$

$$H_{1a}: P(\text{yes}) \neq 63.5\%$$

Note that $P(\text{yes})$ is the probability that the prevalence of mentoring in the Air Force is equal to that of private industry, H_{1n} represents the first research hypothesis stated in the null form, and H_{1a} represents the first research hypothesis stated in the alternative hypothesis form. For the purpose of this study, it is assumed that the respondents are representative of the entire population under consideration (Air Force high-potential officers in the ranks of lieutenant colonel and colonel). By classifying each observation of the nominal data into either "is a mentor" or "is not a mentor," and assuming sampling with replacement, then a normal approximation of the binomial distribution can be used to statistically test the data (21:299-301). This survey, as well as Uecker's and Roche's surveys, is based on sampling data, and the level of significance for rejection is set at 0.01 since both previous researchers collected data from a survey and not a census.

Discriminant analysis, of the data collected from questions 53 and 54, was used to test the second hypothesis.

H2: All Air Force officers, regardless of military background, are equally likely to have a mentor.

Q53: Have you formulated a career plan which you have endeavored to follow over the years?

- a. Yes
- b. No

Q54: With which major command(s) have you most closely identified with throughout your career?

- a. ADC
- b. AFLC
- c. AFSC
- d. ATC
- e. MAC
- f. SAC
- g. TAC
- h. other (please specify)

The purpose of question 53 was to determine whether the formulation of a career plan is related to being mentored. Question 54 asks the respondent to choose which command, if any, he or she most closely identifies with in an attempt to measure whether the mentoring phenomenon is command specific.

The third hypothesis is directly tested by analysis of the data provided by question 44 using the pooled T-test.

H3: Mentored officers are no more likely to be promoted early than unmentored officers.

Q55: Have you received any "Below-the-Zone" promotions?

- a. Yes, to major
- b. Yes, to lieutenant colonel
- c. Yes, to colonel
- d. No

The difference between the promotion rates of the mentored group and the non-mentored group can be

statistically calculated. If the null hypothesis is rejected, then one can conclude that a difference in the promotion rates exists between officers who had obtained a mentor and those who had not.

Hypothesis 4 is concerned with the roles of the mentor in the training and development of junior officers in the Air Force. The hypothesis states:

H4: None of the roles of the mentor as enumerated by Lea and Liebowitz are functions used by mentors in the Air Force.

Q6-15: see survey questionnaire (Appendix A)

Q23-32: see survey questionnaire (Appendix A)

Questions 23 through 32 provide each mentor the opportunity to indicate which role he, as a mentor, perceives himself playing and to what extent. Each question was analyzed using the normal approximation to the binomial distribution after dividing the responses into two groups. The first three responses comprised the first group and the second group was comprised of the fourth response. Once again the hypothesis set becomes:

H4n: $P(\text{role is played}) < 0.05$

H4a: $P(\text{role is played}) > 0.05$

The null hypothesis would be rejected if the computed Z-Statistic is greater than the Z-Critical. The decision rule can be stated in terms of the number of mentors actually having played each role since the number of respondents acknowledging mentorship is known.

By asking the same question of the respondents who indicated that they were once proteges and are now mentors, a comparative analysis can be made between the perceived roles played by one's mentor, and the roles assumed by current mentors. Again, the same statistical analysis can be used on questions 6 through 15 as was applied to questions 23 through 32. A comparative analysis can then be performed to determine the difference in roles played by previous and current mentors.

Questions 5 and 21 were again used to indicate the degree of influence from two perspectives. First, by asking the respondent, as a protege, how much influence his mentor exerted over him; and second, how much influence he perceives himself having over his current protege(s). The questions relate directly to the fifth hypothesis:

H5: Mentored officers perceive that being mentored had no more influence on their own careers than they, as mentors, have on the careers of their proteges.

Q5: How much influence has your mentor exerted over you?

- a. Extraordinary influence
- b. Substantial influence
- c. Moderate influence
- d. Little influence
- e. No influence

Q22: How much influence do you perceive yourself having over your protege? (of longest lasting relationship)

- a. Extraordinary influence
- b. Substantial influence
- c. Moderate influence
- d. Little influence
- e. No influence

This hypothesis was tested using the normal approximation to the binomial distribution after dividing the respondents into two groups based on response. Each question was tested separately. Those that answered "a," "b," or "c" comprised the group supporting the null hypothesis. Those answering "d" or "e," ("little influence" or "no influence") make up the second group in support of the alternate hypothesis. The resulting hypothesis set is:

H5n: $P(\text{of influence}) < 0.05$
H5a: $P(\text{of influence}) > 0.05$

The level of significance for rejection was set at 0.05 and the null hypothesis is rejected if the computed Z-Statistic is greater than the Z-Critical value.

The last hypothesis was tested using the pooled T-test against Likert scale data taken from question 58 of the survey. The null hypothesis and related question are:

H6: Officers who are mentors are likely to be no more satisfied with their job than those who are not mentors.

Q58: How would you rate your degree of satisfaction with your work in terms of the pleasure you derive from it?

- a. Work and pleasure are one
- b. Work affords above average pleasure
- c. Work affords average pleasure
- d. Work affords below average pleasure
- e. Work and pleasure are separate and distinct

The respondents were grouped as to whether or not they considered themselves mentors. The data was then

analyzed at a significance level of 0.05 using the pooled T-test method and was computationally similar to the analysis of hypothesis 3. Again, a rejection of the null hypothesis would indicate a difference in the degree of job satisfaction derived by both groups.

Data Collection Plan

Since this survey instrument had previously been used (23:61-66), only minor changes were required to accommodate the collection of data from the mentor's perspective.

As mentioned earlier, the concept of mentoring in the Air Force has negative connotations. This is due, in part, to the misconceptions, by many, that the mentoring process involves only the role of sponsoring. In an effort to overcome this misconception, a cover letter endorsed by the Dean of the School of Systems and Logistics accompanied the questionnaire. As a result, the AWC designees were very responsive and candid in their comments regarding the subject of mentoring in the Air Force. A discussion of the specific results obtained follows in the next chapter.

IV. Findings

Of the 112 Air Force officers surveyed, a total of 95 (85 percent) responded to the questionnaire. A general profile of the population surveyed is presented in Table I. In terms of current job assignments, this particular group of AWC designees represents a diversified cross-section of Air Force senior officers. Responses to the "current duty title" question (question 57) attest to the diversity of this population. For example, many were squadron commanders, directors at air division level, or system program directors. Still others held positions at the Major Command, Air Staff, or Joint Chiefs of Staff levels. Likewise, age at commissioning was just as varied and ranged from 22 years to 33 years of age. Over half of the respondents received their commissions via ROTC, and 92.6 percent currently have advanced degrees. Appendix B offers a summary of the responses to each question in the survey. In addition, a summary of the results of the statistical tests for each hypothesis is contained in Appendix C.

Hypothesis 1

Since the existence of mentoring in the Air Force had previously been substantiated (27:36), a reevaluation

TABLE I
GENERAL POPULATION INFORMATION

<u>Source of Commission (Question 50)</u>	
Service Academy	14.7%
ROTC	57.9
OTS	27.4
 <u>Age at Commissioning (Question 49)</u>	
20	1.1%
21	29.5
22	30.5
23	23.2
24	4.2
25	4.2
26	3.2
29	1.1
32	2.1
33	1.1
 <u>Highest Educational Level Achieved (Question 51)</u>	
Undergraduate Degree	5.3%
Some Postgraduate Work	2.1
Advanced Degree	92.6
 <u>Below-the-Promotion-Zone (BPZ) Selections (Question 55)</u>	
To Major	37.8%
To Lt Colonel	25.2
To Colonel	26.1
None	10.8
 <u>Major Command Identity (Question 54)</u>	
ADC	2.1%
AFLC	2.1
AFSC	7.4
ATC	3.2
MAC	11.6
SAC	21.1
TAC	15.8
Other (and more than one)	35.8

of the prevalence of the mentoring phenomenon in the Air Force was desired. Hypothesis 1 attempted to determine whether mentoring is as prevalent in the Air Force as it is in civilian organizations, and whether there is a significant difference between Uecker's AWC respondents and the ones surveyed for this project. By computing a normal approximation to the binomial distribution of the 63.5 percent figure of Roche's results and comparing that against the 58 respondents (61.1 percent) who reported having a mentor, one fails to reject the null hypothesis at a 0.01 level of significance. The conclusion is that mentoring among this particular group of AWC students is as prevalent as mentoring in private industry.

Hypothesis 2

Hypothesis 2 examined two career factors which might incline one towards acquiring a mentor. The first career factor was the formulation of a career plan which one endeavored to follow throughout one's career. The second career factor involved whether one's command identity enhanced or inhibited the acquiring of a mentor. Based on discriminant analysis of the data collected from questions 53 and 54, one fails to reject the null hypothesis and can conclude that mentored officers were no more likely to have formulated a career plan than their unmentored counterparts ($p < .63$). In regard to command

identity, a significance value of .07, derived from the discriminant analysis revealed only marginal significance between those reporting one-command association and having a mentor, and those reporting more-than-one command association and having a mentor. Additionally, a cross-tabulation, via the CROSSTAB subprogram of SPSS, of questions 53 and 54 was performed to determine the difference between mentored and unmentored groups versus command association. It was determined that there was no difference between either group. Tactical Air Command was the only command reporting a higher incidence of unmentored officers (53.3 percent) than mentored officers (46.7 percent). However, it must be realized that of the total number of respondents (95), only 15 (15.7 percent) reported TAC association, making the sample size too small on which to base any conclusion. It appears that no single command had a disproportionate number of mentored or unmentored officers when compared to each of the other commands. Further research is required to conclusively determine whether single-command association actually increases one's opportunities for acquiring a mentor, or if multiple-command association is a more successful means for acquiring a mentor.

Hypothesis 3

Hypothesis 3 examined whether mentored officers were more likely to be promoted at an earlier rate than their unmentored counterparts. Running the T-TEST sub-program of SPSS against question 55 and interpreting the pooled variance estimates, one fails to reject the null hypothesis (T-value = 0.08; n.s.) and concludes that there is no significant difference in promotion rates between the mentored and unmentored group. In fact, 81.1 percent of the unmentored officers reported at least one below-the-promotion-zone (BPZ) promotion whereas the mentored officers reported a BPZ rate of 85.3 percent.

Hypothesis 4

Hypothesis 4 attempted to compare the roles of the mentor in the Air Force to the roles played by mentors in the civilian sector. Statistical formulas to compute the normal approximation to the binomial distribution (21:299-301) were used against questions 6 through 15, and questions 23 through 32. Z-Statistics were computed for each role and then matched against Z-Critical values. If the computed Z-Statistic was greater than the Z-Critical value the hypothesis for that role was rejected and the role was one assumed played by the mentor. The first group of questions basically asked past proteges what roles they perceived their mentors playing. From the responses to

questions 6 through 15, one could reject the null hypothesis for each role measured and conclude that all of the roles as defined by Lea and Liebowitz (17:33-34) were roles played by the Air Force officer's mentor ($p < .001$ for each role).

All of the roles except the role of "protector," were selected as being major, primary, or secondary roles by at least two-thirds of the respondents. When comparing what roles were played as secondary roles or better, by percentages, the top three roles identified as roles played by one's mentor were the roles of counselor, advisor, and role model respectively. The second group of questions (23 through 32) were identical to questions 6 through 15. They did, however, ask the respondent to answer from the perspective of the mentor. In other words, what roles did they perceive themselves playing as mentors? Using the same statistical measurement as that used for the first group of questions, again, one can reject the null hypothesis for each role and conclude that all of the roles of the mentor alluded to by Lea and Liebowitz, are roles currently played by officers who are mentors ($p < .001$ for each role). Once again the role of "protector" did not fair as well as the other nine roles of teacher, guide, advisor, counselor, sponsor, supporter, motivator, communicator, and role model, but in this case enjoyed the secondary or higher role for over 70 percent of the respondents.

When classifying the roles played as "secondary or better," and combining the percentages, the top three roles identified as being played by the current mentors were the same as the roles identified from the protege's perspective; counselor, advisor, and role model respectively.

Hypothesis 5

Hypothesis 5 similarly attempted to measure perceptions of the influence of a mentor from a protege and a mentor viewpoint. The responses to the questions used to test hypothesis 5, regarding the influence of a mentor on one's career and the perceived influence on the career of one's protege, clearly support the magnitude of mentor influence in both cases. By dividing question 5 into two groups based on response, and treating question 22 in a similar fashion, a normal approximation to the binomial distribution can be assumed and Z-Statistics can be computed and compared to Z-Critical values. In this case, if the computed Z-Statistic is greater than the Z-Critical value, the null hypothesis is rejected. For both cases, as past proteges and current mentors, the hypothesis that mentors have no influence on the careers of their proteges was rejected ($p < .001$). Eighty-eight percent of the past proteges reported "moderate" or greater influence exerted

on them by their mentors. Of the current mentors, 100 percent felt they exerted "moderate" or greater influence upon their proteges.

Additionally, a T-test comparing question 5 with question 22 revealed a significant T-value of 2.26 ($p < .03$). The null hypothesis, that there is no significant difference between the degree of influence exerted by the officer's previous mentor, and the degree of influence he now has over his protege, is rejected. The conclusion is that current mentors perceive themselves as having greater influence over their proteges than their mentors had over them.

Hypothesis 6

The last hypothesis compared job satisfaction of the officers currently assuming the role of mentor and those officers who were not. Hypothesis 6 examined job satisfaction between these two groups via a T-test of the responses to question 58. One rejects the null hypothesis and can conclude that the officer acting in a mentor capacity is significantly more satisfied with his job than his counterpart who is not assuming the role of mentor ($T\text{-value} = -2.25; p < .01$).

V. Analysis

This chapter deals with the mentoring phenomenon as it applies to the Air Force. The statistical results of the previous chapter will be the basis for discussion when comparing the findings in this effort to the efforts of Roche and Uecker. Comparisons to U.S. Air Force mentoring and mentoring in the private sector can be made. In addition, since the population for this survey and a subsample of Uecker's population are the same (AWC students), direct comparisons of the results can be discussed.

The Prevalence of Mentoring in the Air Force

The statistical test of Hypothesis 1 indicated that mentoring in the Air Force is as prevalent as mentoring in the private organization (61.1 percent versus 63.5 percent). These figures differ significantly from the number (47.6 percent) of AWC students having a mentor in Uecker's survey (27:106). Uecker suggests that the shortfall is due to the difference between the AWC population, and that of Roche's corporate executives (27:45). Perhaps the real shortfall is due to the response rates of each of the surveys; Uecker's 64.4 percent for AWC students versus 85 percent return for this group of AWC students. While

there is agreement with Uecker's contention that general officers may be a more appropriate population to survey in order to obtain an accurate comparison to the Roche survey, the notion that the difference in the mentoring prevalence between the Roche survey and Uecker's survey is based on differing career points is not totally acceptable. Many of the respondents, when asked to respond to question 57 (current duty title) of this survey, indicated job positions that were comparable to, or higher than, the corporate executives surveyed by Roche. Further research, involving Air Force general officers, would be extremely desirable in light of the Army's general officer response rate of 76.4 percent on the topic of mentoring in the PDOS survey (14).

Of similar interest was the concept that Air Force officers are markedly more mobile than the executives surveyed by Roche, and therefore the percentage of military respondents reporting more than one mentor should be higher than that of the civilian sector. In this instance both the Uecker study and this one substantiates this concept with two-thirds (64.2 percent) of the AWC students in Uecker's study reporting more than one mentor, and nearly three-fourths (72.7 percent) reporting more than one mentor in this effort (27:46). It would appear that the increased mobility of both mentors and proteges in the Air Force lends itself to this phenomenon.

Military Background Versus Mentor Acquisition

Hypothesis 2 dealt with the likelihood that two career factors, career plan formulation and command identity, were related to acquiring a mentor. Roche states that the executives in this study were significantly more likely to have formulated a career plan than the unmentored executives (23:15). Uecker also found this to be true of his entire population. However, when the AWC group surveyed by Uecker was tested separately, it was found that mentored and unmentored officers were equally likely to have formulated a career plan (27:48). The results from this study parallel the findings of Uecker in regards to career plan formulation. This particular AWC group was found to be equally likely to have formulated and followed a career plan regardless of whether they had a mentor or assumed the mentor role. Additional respondent comments about career planning indicate that in many instances, "needs of the Air Force" or heretofore unseen career opportunities dictated career plan changes. The subtle difference between Air Force and private sector career planning, as well as the Manpower and Personnel Center (MPC) handling reassignment for military members, may be the driving factors in explaining the difference between Roche's conclusions and those of this study concerning career planning. In any case, the formulation of a career plan, for the

Air Force officers in this AWC class, appears to be independent of mentoring. At the same time, there appears to be little support for the Air Force belief that command identity enhances quick upward mobility, through the acquiring of a mentor, for Air Force officers. In addition to the discriminant analysis performed on the command association factor, a CROSSTABS subprogram of SPSS was run against command identity (question 54) and whether one had a mentor (question 1) to determine if command association was related to mentoring. The overall results indicated that 55.9 percent of the respondents, who were classified as having a mentor, identified with more than one command. Of the respondents reporting single command association, those in Air Defense Command (ADC) and Air Training Command (ATC) were highest with 100 percent mentoring reported. This may lead one to believe that mentoring in the "support" commands is more prevalent or necessary for upward mobility than in others, but the figures can be misleading since ADC and ATC represent only 2.1 percent and 3.2 percent, respectively, of the overall mentored population. Of the operational commands, Strategic Air Command (SAC) reported a higher incidence of mentoring (65.0 percent) than did Military Airlift Command (MAC; 63.6 percent) or Tactical Air Command (TAC; 46.7 percent). Once again, however, the number of respondents reporting command association with SAC was also greater than the number of respondents

reporting command identity for MAC or TAC. While one can reasonably conclude that mentoring appears to be dispersed evenly throughout the commands, the samples in this study are too small to support a conclusion either way. Further research is needed with the focus on samples from each specific command to determine whether mentoring is more prevalent in one command than another.

The Effects of Mentoring on the Air Force Member

Hypotheses 3, 5, and 6 dealt with the effects and perceptions of mentoring on the career of the respondents. The results from this survey on such factors as mentor influence, job satisfaction, and early promotion will be analyzed, and compared to the Roche and Uecker studies in an attempt to better understand the effects of mentoring on the Air Force individual versus the effects of mentoring in the private organization.

Roche found that executives who reported having had a mentor earned more money at a younger age (23:15). "Earned more money at a younger age" equates to "below-the-promotion-zone" promotions for military members. In Uecker's measurement of the BPZ promotion rate of mentored versus unmentored officers, he concluded that, for his entire population (ACSC and AWC students), promotion rates for mentored executives in private organizations and mentored officers paralleled each other. That is to say

that both groups enjoyed a significantly greater probability of early promotion than their respective unmentored counterparts. Once again, however, when the AWC group was tested separately, Uecker's conclusion was that mentored officers were no more likely to be promoted early than unmentored officers (27:110). The results of this survey support Uecker's latter conclusion that the Air Force officer who has acquired a mentor is no more likely to be promoted early than the one who has not. The process by which one is promoted within a private organization and the promotional process within the Air Force may be the factors causing such a noted difference between Roche's results, and those obtained by Uecker and this study concerning early promotions. Further research is necessary to determine whether the sponsorship role of the mentor, as defined by Kram and others (16:25; 17:33-35) is actually negated by MPC's centralized selection process for military promotions.

Hypothesis 5 examined the perceived degree of influence of the mentor from two different viewpoints. First, the respondent was asked to comment on the degree of influence his mentor had on his career. Second, he was asked to comment on the degree of influence he perceived himself having on the career of his protege assuming he, in fact, had taken on the role of mentor. From the protege's point of view, the percentage of respondents

reporting "extraordinary influence" was 14 percent for Roche (23:20), 9.8 percent for Uecker (27.50), and 8.6 percent for this study. While the percentages at this extreme are different, all three studies indicate that more respondents claimed that their mentor had "substantial" rather than "average" influence on the protege. While it appears that the degree of influence a mentor has on his protege in private organizations and in the Air Force is the same, it is interesting to note the change in perception about mentor influence as one evolves from protege to mentor. While 8.6 percent reported that their mentor had exerted "extraordinary influence" over them, and 12.1 percent had reported little or no influence from their mentor, neither of these extremes were reported by respondents who were former proteges and are currently functioning as mentors. In fact, nearly half (47.8 percent) reported that they perceived themselves having "substantial influence" over their proteges. In sum, however, the CROSSTABS subprogram of SPSS indicates that the perceived degree of influence one has on his protege is greater than the perceived degree of influence of one's previous mentor.

The last area examined, concerning effects of mentoring on the individual, is that of job satisfaction. This study revealed that officers who are functioning in the role of mentor are likely to be more satisfied with

their jobs than those who are not. As these senior officers approach the point in their careers where retirement becomes a consideration, perhaps the "generativity" process described by Erikson (8) is being fulfilled through their roles as mentors. This may be one reason for the difference in job satisfaction between the mentor and non-mentor group. Further research on job satisfaction, brought about by the mentoring phenomenon, is needed.

The Perceptions of the Air Force Mentor

Hypothesis 4 dealt with the theoretical roles of the mentor proposed by Lea and Liebowitz (17:33-35). All ten roles--teacher, guide, advisor, counselor, sponsor, supporter, motivator, protector, communicator, and role model, were roles assumed by the surveyed officers. Again, two separate perspectives on the roles of the mentor were requested. The first perspective was from that of the protege and the second from that of the mentor. Since Uecker measured protege perceptions on the roles of mentors (27:56), direct comparison between his findings and the results of this study are possible. To further expand on the concept of mentor roles, a comparison of the roles of the mentor, from both the protege's and mentor's perspective can be analyzed. Tables II and III list the responses to each specific role by category. Uecker found that proteges most frequently listed "Role Model" as the

TABLE II
ROLES OF THE MENTOR BY RESPONSE
(AS PERCEIVED BY THE PROTEGE)

Role	Response =>	Primary	Major	Secondary	Not Played
Role Model		30.4	33.9	25.0	10.7
Sponsor		30.4	26.8	26.8	16.1
Motivator		22.6	41.5	22.6	13.2
Advisor		13.0	51.9	27.8	7.4
Teacher		12.7	32.7	30.9	23.6
Communicator		11.3	22.6	30.2	35.8
Counselor		10.9	54.5	29.1	5.5
Supporter		9.8	47.1	27.5	15.7
Protector		5.8	15.4	23.1	55.8
Guide		5.7	35.8	43.4	15.1

Note: This table depicts the percentage of responses for each role in each category. For example, 30.4 percent of the respondents said that the primary role of their mentor was that of role model. Note that the percentage of the Primary Role responses do not sum to 100 percent as some respondents indicated duplicate role responses.

TABLE III
ROLES OF THE MENTOR BY RESPONSE
(AS PERCEIVED BY THE MENTOR)

Role	Response =>	Primary	Major	Secondary	Not Played
Advisor		35.6	46.7	15.6	2.2
Teacher		24.4	29.3	29.3	17.1
Motivator		22.2	44.4	24.4	8.9
Role Model		13.3	55.6	20.0	11.1
Sponsor		12.2	22.0	53.7	12.2
Counselor		9.1	75.0	15.9	0.0
Guide		7.5	55.0	35.0	2.5
Supporter		5.0	52.5	30.0	12.5
Communicator		4.9	51.2	39.0	4.9
Protector		2.4	34.1	34.1	29.3

Note: This table depicts the percentage of responses for each role in each category. For example, 35.6 percent of the respondents said that the primary role they played, as a mentor, was that of advisor. Note that the percentage of the Primary Role responses do not sum to 100 percent as some respondents indicated duplicate role responses.

primary role assumed by their mentors, while the role of "Sponsor" was one of the lesser roles by comparison (27:54). The next most frequently reported roles, in Uecker's study, were those of "Motivator," "Advisor," and "Counselor." A significant difference surfaced concerning the "Sponsor" role in each of these studies. For this group, the "Sponsor" role shared equal billing with that of "Role Model" (30.4 percent for both). It appears that this more senior group of AWC students perceives that their mentor had provided growth opportunities for them to a much greater extent than Uecker's respondents. One possible explanation is that Uecker's data was a combination of ACSC and AWC responses, and the misunderstanding by the younger ACSC group of the "Sponsor" role affected the data. The next most frequently reported roles were those of "Motivator," "Advisor," and "Teacher." "Motivator" and "Advisor" compare favorably with Uecker's findings, but the role of "Counselor" is replaced with that of "Teacher" for this study. In light of similarities in the definition of teacher and counselor given by Lea and Liebowitz, and the closeness in the percentages reported for both of these roles, there does not appear to be a significant difference between either group. Table III lists the responses to each specific role by category, as perceived by the mentor. Again, the change in the perceptions of roles played by the mentor as one evolves from protege to mentor are

striking. The most frequently reported primary roles from the protege viewpoint were "Role Model/Sponsor," "Motivator," and "Advisor." Mentors, which were largely the same group, when asked to select the roles they perceived themselves playing, chose "Advisor," "Teacher," and "Motivator" respectively. Lea and Liebowitz state that advising usually occurs in response to a request by the protege (17:33-35). Perhaps it is indicative of today's junior officers to be more open and questioning about such matters as career development, promotions, and daily job specifics. It would follow then that current Air Force mentors would choose "Teacher" and "Motivator" as the next most frequently named primary roles. In sum, the indication is that Air Force mentors perceive themselves as taking a more active role in the career and leadership development of their subordinates.

While an analysis of the roles played by today's mentors paints a rather rosey picture, comments about mentor-protege relationships in the Air Force, encouraged at the end of the questionnaire, show that great misconceptions on the part of the unmentored officers still exist about mentoring. The most frequently mentioned roles, when mentoring received negative connotations, were those of "Sponsor" and "Protector." Perhaps the reason the role of "Sponsor" received such a high rating from the protege's perspective, is because it is being asked of

"mature proteges" who have the advantage of hindsight and can better appreciate the sponsor role played by their mentor. "Protector," on the other hand, was rated last from both perspectives. If this function enhances future decision making when the protege is faced with uncertainty, as Lea and Liebowitz contend, then perhaps the definition of the term "Protector" is being misconstrued by proteges and mentors alike. Further investigation of the roles of the mentor in the Air Force might help to clear up this point and focus attention to the importance of the protector role.

While each hypothesis in this chapter has been analyzed, it is clear that a great many questions about the mentoring process in the Air Force have yet to be answered. The next chapter will discuss conclusions and recommendations that may be of value in overcoming some of the misconceptions about the mentoring process in the Air Force.

VI. Conclusions and Recommendations

This thesis effort attempted to measure the prevalence of mentoring in the Air Force, to gain insight into the mentoring process by addressing issues from both the protege's and the mentor's perspectives, and to belay, through empirical measurement, some of the misconceptions about Air Force mentoring.

Just as Roche found that mentoring among top executives in the business world was significant, the results of this project indicate that mentoring in the Air Force is significantly close to the 63.5 percent reported by Roche (23:14). In fact, the results support Uecker's conclusion that mentoring "is a fact of life in the Air Force just as it is in most large organizations" (27:56).

Choice of Population

While general officers may be the ideal population to survey in order to more accurately compare mentoring in the Air Force with mentoring in the private sector, this study clearly shows that it is not too early in the career of those officers selected for AWC to become mentors. Of the respondents reporting having had a mentor at some stage in their career, 70.6 percent also reported continuing the mentoring process by acquiring a protege. Only 13.5

percent of the unmentored group reported taking on a protege. This would indicate that, in essence, the mentoring phenomenon is self-perpetuating. The fact that this research did not include survey data from general officers does not limit the parallels that can be made against Roche's population of top executives. What limits the research is the population size of 112. The sheer sample size of approximately 340 active duty Air Force general officers would make parallel comparisons much more valid. In addition, a great deal could be learned about the mentoring phenomenon in the Air Force, and how it compares to the general officer population in the Army, if MPC would authorize a survey of Air Force general officers, or Air Staff would conduct a survey much like the PDOS survey conducted by the Army.

Perceptions of Air Force Mentoring

Space at the end of the questionnaire was provided to solicit comments about mentor-protege relationships. While statistical analysis can be made of the questions answered with facts, the open-ended items are virtually impossible to assess statistically. Yet the answers to these questions perhaps give the best insight to respondent attitude toward, and perception of, the mentoring phenomenon as it pertains to the Air Force. The following comments are direct quotations from respondents who seemed

to understand the mentoring concept and supported the current mentoring system in the Air Force:

-- believe these relationships can play critical role in maintaining a "quality force" in the USAF. Also believe this subject is not well publicized or orchestrated--tremendous opportunities for working our most critical asset (people) go untapped! Need to fix this "oversight" and ensure we make attractive an Air Force career.

-- I believe it's necessary and right. Someone with first-hand knowledge of a protege's potential must guide him and get him the right jobs.

-- I believe the mentor-protege system is valuable to the organization in helping to identify future leaders and those with potential. How that identification is handled i.e., choice jobs, endorsements, etc. should be handled delicately to insure equitable opportunity for all.

-- the roles that mentors play are essential because our personnel system, which has to deal with thousands of people, is not designed to discriminate between the good and the very good officer without the input provided by the sponsorship system.

-- as a mentor, I look for those who show great potential, those who are dedicated to the Air Force, who are the top of their class in competence, who look sharp, set the example in all they do, care about people and the mission and who are not so consumed by their own aspirations that they step on people to achieve them. In short, I look for those I wish to entrust with the future of the Air Force.

Misconceptions About Air Force Mentoring

While the majority of the respondents appeared to support, or at least accept, the current Air Force mentoring system, there were those who viewed the system from a more negative perspective. The following comments illustrate this:

-- I do not like the mentor-protege relationship. I think people should be promoted, get jobs, etc. based on job performance not on who they know.

-- I'm not very impressed with most that I've seen. Throughout my career I have observed in some of my peers an outright groveling behavior to establish such a relationship. Also, the mentor-protege relationship tends to perpetuate identical traits--it's a form of inbreeding.

-- I believe they (mentor-protege relationships) are too often abused and that "favorites" are advanced ahead of more capable and deserving, but less visible officers.

-- I feel that the fact that I did not develop a mentor-protege relationship hindered my opportunity for BPZ promotion.

In light of the preceding comments, it is evident that there exists, even at this senior officer level, a great misconception of the mentoring process as a whole. This misconception is further inflated as one simply listens to the comments made about "Sponsoring" at the junior officer level. In fact, one respondent commented thusly:

Through the last two years, while dealing with many young officers, I have observed that this relationship has done a great deal to kill the motivation in young officers. They feel that the lack of a "sponsor" will limit their careers.

As many authors point out (16:33-39; 17:33-35), sponsoring is not mentoring, but only one of many functions practiced by the mentor. This appears to be true not only for private industry, but for military mentors as well.

Mentoring in the Air Force is an informal process that has been around for a long time. Air Force advances

in technology require that the learning curve of the young junior officer be accelerated to the point where formal training and education may not be able to handle it. Mentoring may be one way to facilitate the requirement to rapidly learn how to effectively accomplish one's job. Most studies show that mentoring is good for everyone involved. The mentor, protege, and especially the Air Force can benefit from the process. Problems arise with misconceptions about what mentoring is, what it does, and how the process works.

One of the most common misconceptions about the mentoring process is the notion that in order to be promoted below-the-promotion-zone, one needs a "sponsor" or mentor. This is simply not validated by this research. The fact that 86.5 percent of the unmentored group received at least one below-the-promotion-zone promotion illustrates that to be successful in the Air Force one does not necessarily require a mentor. One respondent's comment that "the successes (proteges) probably would have been bright stars without a mentor" further illustrates the point that most mentors choose those individuals who already show potential.

Another misconception not supported by this research is the idea that mentoring "breeds clones"; that is, proteges will emulate the roles played by their mentors to such a degree that the good and bad characteristics

of the mentor are simply "inbred" into the next generation of managers. While one respondent comments on the tendency to perpetuate identical traits from a mentor-protege relationship--a form of inbreeding, another respondent flatly states that "I treasure those relationships, taking what I feel is the best from them and applying them to my form of leadership." What is interesting to note is that the first comment is made by an individual who was neither a protege nor had assumed the mentor role, and that the majority of the negative comments concerning mentoring were from individuals who had never experienced a mentor-protege relationship. This finding is in line with that of Uecker in that "it appears that mentored officers have an overall positive feeling about mentoring," while "the unmentored officers view mentoring in rather negative terms" (27:52). The fact that this research indicates that proteges who have become mentors, perceive the roles they now play differently from the roles played by their mentors, nullifies the "clone" misconception. For example, this group expressed their protege viewpoint by indicating that the primary roles that their mentors had played were "Role Model," "Sponsor," "Motivator," and "Advisor." Now, as mentors, they perceive themselves as advisors, teachers, and motivators. While some of the roles are identical, the degree of importance placed on each role has clearly shifted. Perhaps changes in Air Force environment

necessitate a change in traits, and these changes occur as one evolves from protege to mentor--they take what they feel is the best from their mentor and apply them to their form of leadership.

Because of the negative comments cited earlier, it is evident that there exists even at the senior officer level a great misconception of the mentoring process as a whole. In order for the Air Force to benefit from the process, it needs to publicize the reasons for the informal mentoring process in the Air Force. If it does nothing for the senior officers who have not experienced a mentor-protege relationship and are near the end of their careers, so be it. The target population should be Air Force junior officers whose motivation has been cut in half by the misconceptions about mentoring that are perpetrated by the uninformed.

Research Needs

Further research is required to better understand the mentoring process in the Air Force. First, to better compare mentoring in the private sector and in the Army with mentoring in the Air Force, a survey of a broader cross-section of officers, including general officers, is needed. Once this is accomplished, an internal study of mentoring within the Air Force is needed to determine whether the mentoring phenomenon is command specific.

Other research areas could include investigating what makes Air Force mentors more satisfied with their jobs than non-mentors, how proteges are selected and what mentors look for in a potential protege, whether the degree of influence exerted by one's mentor is a driving factor in the decision of a protege to assume the role of mentor later on in his career, and finally what effect the MPC assignment and promotion processes have on mentoring in the Air Force.

The mentoring phenomenon and its effects on the Air Force as an organization is wide open to further research. The Army PDOS survey would be an ideal tool to use for a comparison of inter-service mentoring.

It is hoped that responsible individuals at the highest levels come to realize that mentoring can play an important role in the leadership development of Air Force officers. In the future, mentoring should be encouraged, and further research in the area should be approved.

Appendix A: The Survey Questionnaire Used

A SURVEY TO DETERMINE THE USE OF MENTORING AS A TOOL FOR LEADERSHIP DEVELOPMENT IN THE AIR FORCE

USAF Survey Control Number 85-50

The purpose of this survey is to determine the prevalence of the mentoring phenomenon in the Air Force and how mentoring has affected the careers of the current senior service school designees. As one of those officers, your responses to the questions will play an important part in assessing the effects of this management tool.

KEY WORDS

The following are definitions of key words that recur throughout this questionnaire:

1. MENTORING: A relatively long-term relationship (more than two years) between an older and a younger adult where the senior member of the relationship plays a major role in shaping and molding the younger member in his or her professional career.
2. MENTOR: The senior member of the relationship.
3. PROTEGE: The junior member of the relationship.

Your individual responses will be held in strictest confidence and will not be provided to any person or organization. Only those individuals directly involved in this research will have access to your completed questionnaire; however, there will be no way to identify the persons by name who complete the questionnaire.

CONFIDENTIAL SURVEY OF SENIOR SERVICE SCHOOL DESIGNEES

Please feel free to use either pen or pencil when answering the questions. A number of questions may have more than one answer; please mark all that apply to you.

YOU AS THE PROTEGE (Junior member of the mentoring relationship)

1. At any stage of your career, have you had a mentor/protege relationship with a person who took a personal interest in your career and who guided you or helped mold your career?
 - a. Yes
 - b. No

IF YOUR ANSWER TO QUESTION 1 WAS "NO" SKIP TO QUESTION 19.

2. If yes, how many mentors have you had? _____

For questions 3 through 18, please base your answers on the mentor who had the most influence on your professional life.

3. When did your mentor first exhibit an interest in you?
 - a. During college/education
 - b. Prior to military career
 - c. During first 5 years of career
 - d. During 6-10th years of career
 - e. During 11-20th years of career
 - f. Other (please specify) _____

4. What position did your mentor then hold in relation to you?

- a. Professor/teacher
- b. Friend
- c. Relative
- d. Immediate supervisor
- e. Squadron commander
- f. Wing commander (or equivalent)
- g. General officer
- h. Other (please specify) _____

5. How much influence has your mentor exerted over you?

- a. Extraordinary influence
- b. Substantial influence
- c. Moderate influence
- d. Little influence
- e. No influence

The following is a list of some of the roles that a mentor can play in his relationship with a protege. Please indicate the extent to which your mentor has played each of the following roles.

- 1. The most important role which my mentor played
- 2. A major role my mentor played
- 3. A secondary role my mentor played
- 4. Did not constitute a role played by my mentor
- 6. ___ Teacher
- 7. ___ Guide to the "unwritten rules" of the organization
- 8. ___ Being available to provide advice
- 9. ___ Counselor
- 10. ___ Sponsor
- 11. ___ Provider of support to protege's plans/ideas
- 12. ___ Motivator
- 13. ___ Protector (to provide a buffer for the protege's risk taking)
- 14. ___ Provider of open lines of communication to/from senior Air Force members
- 15. ___ Role model

16. Do you still have a relationship with your mentor?
- a. Yes
 - b. No
17. If yes, how would you describe your current relationship?
- a. Close
 - b. Friendly
 - c. Neutral
 - d. Not friendly
 - e. No contact
18. If no, how many years did the relationship last? _____

YOU AS THE MENTOR (Senior member of a mentoring relationship)

19. At any stage in your career, have you had a mentor/protége relationship in which you took a personal interest in guiding or molding the career of another individual?
- a. Yes
 - b. No

IF YOUR ANSWER TO QUESTION 19 WAS "NO" SKIP TO QUESTION 33

20. If yes, how many proteges do you currently have? _____
21. How long has your longest relationship lasted? _____
22. How much influence do you perceive yourself having over your protégé? (of longest lasting relationship)
- a. Extraordinary influence
 - b. Substantial influence
 - c. Moderate influence
 - d. Little influence
 - e. No influence

Again, the following is a list of some of the roles that a mentor can play in his relationship with a protege. Please indicate the extent to which you, as a mentor, have played each of the following roles.

1. The most important role I play
 2. A major role I play
 3. A secondary role I play
 4. Does not constitute a role I play
-
23. ☐ Teacher
 24. ☐ Guide to the "unwritten rules" of the organization
 25. ☐ Being available to provide advice
 26. ☐ Counselor
 27. ☐ Sponsor
 28. ☐ Provider of support to protege's plans/ideas
 29. ☐ Motivator
 30. ☐ Protector (to provide a buffer for the protege's risk taking)
 31. ☐ Provider of open lines of communication to/from the protege
 32. ☐ Role Model

The following is a list of some of the characteristics associated with a mentor. Please indicate the importance you place on each characteristic by selecting the answer which best represents your attitude concerning the qualities and characteristics a mentor should possess.

1. Extremely important
 2. Moderately important
 3. Slightly important
 4. Of little importance
 5. Not important at all
-
33. ☐ Knowledge of business in general
 34. ☐ Knowledge of the Air Force
 35. ☐ Knowledge of people in the organization
 36. ☐ Rank in the organization
 37. ☐ Time remaining within the Air Force
 38. ☐ Organizational power
 39. ☐ Respect from superiors in USAF/DOD
 40. ☐ Respect from peers in USAF/DOD
 41. ☐ Respect from subordinates in USAF/DOD
 42. ☐ Respect of peers outside USAF/DOD
 43. ☐ Understanding people in general

44. ☐ Knowledge of the use of power
45. ☐ Willingness to share knowledge and understanding
46. ☐ Willingness to counsel subordinates
47. ☐ Others (please specify) _____
48. ☐ _____
49. At what age did you receive your commission?
50. Please indicate the source of your commission.
- a. Service Academy
 - b. ROTC
 - c. OTS
 - d. Other (Aviation cadet, direct commission, etc.) _____
51. What was your highest educational attainment?
- a. High School graduate
 - b. Attended college
 - c. College graduate
 - d. Some postgraduate work
 - e. Advanced degree
52. What was your father's occupation at the time you entered the labor force full time?
- a. Military officer
 - b. Military noncommissioned officer
 - c. Retired military
 - d. Civilian (please specify occupation) _____
53. Have you formulated a career plan which you have endeavored to follow over the years?
- a. Yes
 - b. No
54. With which major command(s) have you most closely identified with throughout your career?
- a. ADC
 - b. AFLC
 - c. AFSC
 - d. ATC
 - e. MAC
 - f. SAC
 - g. TAC
 - h. Other (please specify) _____

55. Have you received any "Below-the-Zone" promotions?
- a. Yes, to major
 - b. Yes, to lieutenant colonel
 - c. Yes, to colonel
 - d. No
56. How would you rate your degree of satisfaction with your career progress?
- a. Very high
 - b. High
 - c. Average
 - d. Low
 - e. Very low
57. What is your current duty title?
- _____
58. How would you rate your degree of satisfaction with your work in terms of the pleasure you derive from it?
- a. Work and pleasure are one
 - b. Work affords above average pleasure
 - c. Work affords average pleasure
 - d. Work affords below average pleasure
 - e. Work and pleasure are separate and distinct
59. In your opinion, what characteristics of the protege, or potential protege, are most important?

If you have any comments about mentor-protege relationships, please use the back of the survey.

Thank you for your assistance. Be assured that all information will be treated in confidence.

Appendix B: Response Summary Information

Q1. HAD MENTOR

Code	Absolute Frequency	Relative Frequency (Percent)	Adjusted Frequency (Percent)	Cumulative Frequency (Percent)
1	58	61.1	61.1	61.1
2	37	38.9	38.9	100.0
Total	95	100.0	100.0	
Valid Cases: 95			Missing Cases: 0	

Q2. NUMBER OF MENTORS

Code	Absolute Frequency	Relative Frequency (Percent)	Adjusted Frequency (Percent)	Cumulative Frequency (Percent)
1	15	15.8	27.3	27.3
2	21	22.1	33.2	65.5
3	12	12.6	21.8	87.3
4	2	2.1	3.6	90.9
5	4	4.2	7.3	98.2
6	1	1.1	1.8	100.0
0	56	42.1	Missing	100.0
Total	111	100.0	100.0	
Valid Cases: 55			Missing Cases: 40	

Q3. WHEN MENTOR ACQUIRED

Code	Absolute Frequency	Relative Frequency (Percent)	Adjusted Frequency (Percent)	Cumulative Frequency (Percent)
1	1	1.1	1.9	1.9
3	11	11.6	20.4	22.2
4	18	18.9	33.3	55.6
5	23	24.2	42.6	98.1
6	1	1.1	1.9	100.0
0	41	43.2	Missing	100.0
Total	95	100.0	100.0	
Valid Cases: 54			Missing Cases: 41	

Q4. MENTOR POSITION

Code	Absolute Frequency	Relative Frequency (Percent)	Adjusted Frequency (Percent)	Cumulative Frequency (Percent)
2	2	2.1	3.4	3.4
4	12	12.6	20.7	24.1
5	8	8.4	13.8	37.9
6	9	9.5	15.5	53.4
7	26	27.4	44.8	98.3
8	1	1.1	1.7	100.0
0	37	38.9	Missing	100.0
Total	95	100.0	100.0	
Valid Cases: 58			Missing Cases: 37	

Q5. MENTOR INFLUENCE

Code	Absolute Frequency	Relative Frequency (Percent)	Adjusted Frequency (Percent)	Cumulative Frequency (Percent)
1	5	5.3	8.6	8.6
2	25	26.3	43.1	51.7
3	21	22.1	36.2	87.9
4	7	7.4	12.1	100.0
0	37	38.9	Missing	100.0
Total	95	100.0	100.0	
Valid Cases: 58			Missing Cases: 37	

Q6. TEACHER

Code	Absolute Frequency	Relative Frequency (Percent)	Adjusted Frequency (Percent)	Cumulative Frequency (Percent)
1	7	7.4	12.7	12.7
2	18	18.9	32.7	45.5
3	17	17.9	30.9	76.4
4	13	13.7	23.6	100.0
0	40	42.1	Missing	100.0
Total	95	100.0	100.0	
Valid Cases: 55			Missing Cases: 40	

Q7. GUIDE

Code	Absolute Frequency	Relative Frequency (Percent)	Adjusted Frequency (Percent)	Cumulative Frequency (Percent)
1	3	3.2	5.7	5.7
2	19	20.0	35.8	41.5
3	23	24.2	43.4	84.9
4	8	8.4	15.1	100.0
0	42	44.2	Missing	100.0
Total	95	100.0	100.0	
Valid Cases: 53			Missing Cases: 42	

Q8. ADVISOR

Code	Absolute Frequency	Relative Frequency (Percent)	Adjusted Frequency (Percent)	Cumulative Frequency (Percent)
1	7	7.4	13.0	13.0
2	28	29.5	51.9	64.8
3	15	15.8	27.8	92.6
4	4	4.2	7.4	100.0
0	41	43.2	Missing	100.0
Total	95	100.0	100.0	
Valid Cases: 54			Missing Cases: 41	

Q9. COUNSELOR

Code	Absolute Frequency	Relative Frequency (Percent)	Adjusted Frequency (Percent)	Cumulative Frequency (Percent)
1	6	6.3	10.9	10.9
2	30	31.6	54.5	65.5
3	16	16.8	29.1	94.5
4	3	3.2	5.5	100.0
0	40	42.1	Missing	100.0
Total	95	100.0	100.0	
Valid Cases: 55			Missing Cases: 40	

Q10. SPONSOR

Code	Absolute Frequency	Relative Frequency (Percent)	Adjusted Frequency (Percent)	Cumulative Frequency (Percent)
1	17	17.9	30.4	30.4
2	15	15.8	26.8	57.1
3	15	15.8	26.8	83.9
4	9	9.5	16.1	100.0
0	39	41.1	Missing	100.0
Total	95	100.0	100.0	
Valid Cases: 56			Missing Cases: 39	

Q11. SUPPORTER

Code	Absolute Frequency	Relative Frequency (Percent)	Adjusted Frequency (Percent)	Cumulative Frequency (Percent)
1	5	5.3	9.8	9.8
2	24	25.3	47.1	56.9
3	14	14.7	27.5	84.3
4	8	8.4	15.7	100.0
0	44	46.3	Missing	100.0
Total	95	100.0	100.0	
Valid Cases: 51			Missing Cases: 44	

Q12. MOTIVATOR

Code	Absolute Frequency	Relative Frequency (Percent)	Adjusted Frequency (Percent)	Cumulative Frequency (Percent)
1	12	12.6	22.6	22.6
2	22	23.2	41.5	64.2
3	12	12.6	22.6	86.8
4	7	7.4	13.2	100.0
0	42	44.2	Missing	100.0
Total	95	100.0	100.0	
Valid Cases: 53			Missing Cases: 42	

Q13. PROTECTOR

Code	Absolute Frequency	Relative Frequency (Percent)	Adjusted Frequency (Percent)	Cumulative Frequency (Percent)
1	3	3.2	5.8	5.8
2	8	8.4	15.4	21.2
3	12	12.6	23.1	44.2
4	29	30.5	55.8	100.0
0	43	45.3	Missing	100.0
Total	95	100.0	100.0	
Valid Cases: 52			Missing Cases: 43	

Q14. COMMUNICATOR

Code	Absolute Frequency	Relative Frequency (Percent)	Adjusted Frequency (Percent)	Cumulative Frequency (Percent)
1	6	6.3	11.3	11.3
2	12	12.6	22.6	34.0
3	16	16.8	30.2	64.2
4	19	20.0	35.8	100.0
0	42	44.2	Missing	100.0
Total	95	100.0	100.0	
Valid Cases: 53			Missing Cases: 42	

Q15. ROLE MODEL

Code	Absolute Frequency	Relative Frequency (Percent)	Adjusted Frequency (Percent)	Cumulative Frequency (Percent)
1	17	17.9	30.4	30.4
2	19	20.0	33.9	64.3
3	14	14.7	25.0	89.3
4	6	6.3	10.7	100.0
0	39	41.1	Missing	100.0
Total	95	100.0	100.0	
Valid Cases: 56			Missing Cases: 39	

Q16. CURRENT MENTOR STATUS

Code	Absolute Frequency	Relative Frequency (Percent)	Adjusted Frequency (Percent)	Cumulative Frequency (Percent)
1	35	36.8	60.3	60.3
2	23	24.2	39.7	100.0
0	37	38.9	Missing	100.0
Total	95	100.0	100.0	
Valid Cases: 58			Missing Cases: 37	

Q17. CURRENT RELATION

Code	Absolute Frequency	Relative Frequency (Percent)	Adjusted Frequency (Percent)	Cumulative Frequency (Percent)
1	10	10.5	29.4	29.4
2	24	25.3	70.6	100.0
0	61	64.2	Missing	100.0
Total	95	100.0	100.0	
Valid Cases: 34			Missing Cases: 61	

Q18. YEARS RELATION LASTED

Code	Absolute Frequency	Relative Frequency (Percent)	Adjusted Frequency (Percent)	Cumulative Frequency (Percent)
1	1	1.1	4.3	4.3
2	6	6.3	26.1	30.4
3	5	5.3	21.7	52.2
4	6	6.3	26.1	78.3
5	1	1.1	4.3	82.6
7	1	1.1	4.3	87.0
8	1	1.1	4.3	91.3
9	1	1.1	4.3	95.7
10	1	1.1	4.3	100.0
0	72	75.8	Missing	100.0
Total	95	100.0	100.0	
Valid Cases: 23			Missing Cases: 72	

Q19. HAVE PROTEGE

Code	Absolute Frequency	Relative Frequency (Percent)	Adjusted Frequency (Percent)	Cumulative Frequency (Percent)
1	46	48.4	48.4	48.4
2	49	51.6	51.6	100.0
Total	95	100.0	100.0	
Valid Cases: 95			Missing Cases: 0	

Q20. NUMBER OF PROTEGES

Code	Absolute Frequency	Relative Frequency (Percent)	Adjusted Frequency (Percent)	Cumulative Frequency (Percent)
1	12	12.6	27.9	27.9
2	18	18.9	41.9	69.8
3	4	4.2	9.3	79.1
4	4	4.2	9.3	88.4
5	3	3.2	7.0	95.3
6	1	1.1	2.3	97.7
12	1	1.1	2.3	100.0
0	52	54.7	Missing	100.0
Total	95	100.0	100.0	
Valid Cases: 43			Missing Cases: 52	

Q21. YEARS LONGEST RELATIONSHIP

Code	Absolute Frequency	Relative Frequency (Percent)	Adjusted Frequency (Percent)	Cumulative Frequency (Percent)
1	2	2.1	4.4	4.4
2	12	12.6	26.7	31.1
3	12	12.6	26.7	57.8
4	7	7.4	15.6	73.3
5	3	3.2	6.7	80.0
6	2	2.1	4.4	84.4
7	2	2.1	4.4	88.9
8	2	2.1	4.4	93.3
10	2	2.1	4.4	97.8
11	1	1.1	2.2	100.0
0	50	52.6	Missing	100.0
Total	95	100.0	100.0	
Valid Cases: 45			Missing Cases: 50	

Q22. INFLUENCE ON PROTEGE

Code	Absolute Frequency	Relative Frequency (Percent)	Adjusted Frequency (Percent)	Cumulative Frequency (Percent)
2	22	23.2	47.8	47.8
3	24	25.3	52.2	100.0
0	49	51.6	Missing	100.0
Total	95	100.0	100.0	
Valid Cases: 46			Missing Cases: 49	

Q23. TEACHER

Code	Absolute Frequency	Relative Frequency (Percent)	Adjusted Frequency (Percent)	Cumulative Frequency (Percent)
1	10	10.5	24.4	24.4
2	12	12.6	29.3	53.7
3	12	12.6	29.3	82.9
4	7	7.4	17.1	100.0
0	54	56.8	Missing	100.0
Total	95	100.0	100.0	
Valid Cases: 41			Missing Cases: 54	

Q24. GUIDE

Code	Absolute Frequency	Relative Frequency (Percent)	Adjusted Frequency (Percent)	Cumulative Frequency (Percent)
1	3	3.2	7.5	7.5
2	22	23.2	55.0	62.5
3	14	14.7	35.0	97.5
4	1	1.1	2.5	100.0
0	55	57.9	Missing	100.0
Total	95	100.0	100.0	
Valid Cases: 40			Missing Cases: 55	

Q25. ADVISOR

Code	Absolute Frequency	Relative Frequency (Percent)	Adjusted Frequency (Percent)	Cumulative Frequency (Percent)
1	16	16.8	35.6	35.6
2	21	22.1	46.7	82.2
3	7	7.4	15.6	97.8
4	1	1.1	2.2	100.0
0	50	52.6	Missing	100.0
Total	95	100.0	100.0	
Valid Cases: 45			Missing Cases: 50	

Q26. COUNSELOR

Code	Absolute Frequency	Relative Frequency (Percent)	Adjusted Frequency (Percent)	Cumulative Frequency (Percent)
1	4	4.2	9.1	9.1
2	33	34.7	75.0	84.1
3	7	7.4	15.9	100.0
0	51	53.7	Missing	100.0
Total	95	100.0	100.0	
Valid Cases: 44			Missing Cases: 51	

Q27. SPONSOR

Code	Absolute Frequency	Relative Frequency (Percent)	Adjusted Frequency (Percent)	Cumulative Frequency (Percent)
1	5	5.3	12.2	12.2
2	9	9.5	22.0	34.1
3	22	23.2	53.7	87.8
4	5	5.3	12.2	100.0
0	54	56.8	Missing	100.0
Total	95	100.0	100.0	
Valid Cases: 41			Missing Cases: 54	

Q28. SUPPORTER

Code	Absolute Frequency	Relative Frequency (Percent)	Adjusted Frequency (Percent)	Cumulative Frequency (Percent)
1	2	2.1	5.0	5.0
2	21	22.1	52.5	57.5
3	12	12.6	30.0	87.5
4	5	5.3	12.5	100.0
0	55	57.9	Missing	100.0
Total	95	100.0	100.0	
Valid Cases: 40			Missing Cases: 55	

Q29. MOTIVATOR

Code	Absolute Frequency	Relative Frequency (Percent)	Adjusted Frequency (Percent)	Cumulative Frequency (Percent)
1	10	10.5	22.2	22.2
2	20	21.1	44.4	66.7
3	11	11.6	24.4	91.1
4	4	4.2	8.9	100.0
0	50	52.6	Missing	100.0
Total	95	100.0	100.0	
Valid Cases: 45			Missing Cases: 50	

Q30. PROTECTOR

Code	Absolute Frequency	Relative Frequency (Percent)	Adjusted Frequency (Percent)	Cumulative Frequency (Percent)
1	1	1.1	2.4	2.4
2	14	14.7	34.1	36.6
3	14	14.7	34.1	70.7
4	12	12.6	29.3	100.0
0	54	56.8	Missing	100.0
Total	95	100.0	100.0	
Valid Cases: 41			Missing Cases: 54	

Q31. COMMUNICATOR

Code	Absolute Frequency	Relative Frequency (Percent)	Adjusted Frequency (Percent)	Cumulative Frequency (Percent)
1	2	2.1	4.9	4.9
2	21	22.1	51.2	56.1
3	16	16.8	39.0	95.1
4	2	2.1	4.9	100.0
0	54	56.8	Missing	100.0
Total	95	100.0	100.0	
Valid Cases: 41			Missing Cases: 54	

Q32. ROLE MODEL

Code	Absolute Frequency	Relative Frequency (Percent)	Adjusted Frequency (Percent)	Cumulative Frequency (Percent)
1	6	6.3	13.3	13.3
2	25	26.3	55.6	68.9
3	9	9.5	20.0	88.9
4	5	5.3	11.1	100.0
0	50	52.6	Missing	100.0
Total	95	100.0	100.0	
Valid Cases: 45			Missing Cases: 50	

Q33. KNOW GENERAL BUSINESS

Code	Absolute Frequency	Relative Frequency (Percent)	Adjusted Frequency (Percent)	Cumulative Frequency (Percent)
1	28	29.5	29.8	29.8
2	43	45.3	45.7	75.5
3	21	22.1	22.3	97.9
4	2	2.1	2.1	100.0
0	1	1.1	Missing	100.0
Total	95	100.0	100.0	
Valid Cases: 94			Missing Cases: 1	

Q34. KNOW USAF

Code	Absolute Frequency	Relative Frequency (Percent)	Adjusted Frequency (Percent)	Cumulative Frequency (Percent)
1	64	67.4	68.1	68.1
2	27	28.4	28.7	96.8
3	2	2.1	2.1	98.9
4	1	1.1	1.1	100.0
0	1	1.1	Missing	100.0
Total	95	100.0	100.0	
Valid Cases: 94			Missing Cases: 1	

Q35. KNOW PEOPLE IN ORGANIZATION

Code	Absolute Frequency	Relative Frequency (Percent)	Adjusted Frequency (Percent)	Cumulative Frequency (Percent)
1	55	57.9	59.1	59.1
2	32	33.7	34.4	93.5
3	5	5.3	5.4	98.9
4	1	1.1	1.1	100.0
0	2	2.1	Missing	100.0
Total	95	100.0	100.0	
Valid Cases: 93			Missing Cases: 2	

Q36. RANK IN ORGANIZATION

Code	Absolute Frequency	Relative Frequency (Percent)	Adjusted Frequency (Percent)	Cumulative Frequency (Percent)
1	27	28.4	29.0	29.0
2	41	43.2	44.1	73.1
3	20	21.1	21.5	94.6
4	4	4.2	4.3	98.9
5	1	1.1	1.1	100.0
0	2	2.1	Missing	100.0
Total	95	100.0	100.0	
Valid Cases: 93			Missing Cases: 2	

Q37. TIME TO GO IN USAF

Code	Absolute Frequency	Relative Frequency (Percent)	Adjusted Frequency (Percent)	Cumulative Frequency (Percent)
1	12	12.6	12.9	12.9
2	29	30.5	31.2	44.1
3	23	24.2	24.7	68.8
4	17	17.9	18.3	87.1
5	12	12.6	12.9	100.0
0	2	2.1	Missing	100.0
Total	95	100.0	100.0	
Valid Cases: 93			Missing Cases: 2	

Q38. ORGANIZATIONAL POWER

Code	Absolute Frequency	Relative Frequency (Percent)	Adjusted Frequency (Percent)	Cumulative Frequency (Percent)
1	41	43.2	45.1	45.1
2	27	28.4	29.7	74.7
3	17	17.9	18.7	93.4
4	5	5.3	5.5	98.9
5	1	1.1	1.1	100.0
0	4	4.2	Missing	100.0
Total	95	100.0	100.0	
Valid Cases: 91			Missing Cases: 4	

Q39. SUPERIOR'S RESPECT

Code	Absolute Frequency	Relative Frequency (Percent)	Adjusted Frequency (Percent)	Cumulative Frequency (Percent)
1	53	55.8	57.0	57.0
2	29	30.5	31.2	88.2
3	9	9.5	9.7	97.8
4	2	2.1	2.2	100.0
0	2	2.1	Missing	100.0
Total	95	100.0	100.0	
Valid Cases: 93			Missing Cases: 2	

Q40. USAF PEER'S RESPECT

Code	Absolute Frequency	Relative Frequency (Percent)	Adjusted Frequency (Percent)	Cumulative Frequency (Percent)
1	49	51.6	52.7	52.7
2	35	36.8	37.6	90.3
3	6	6.3	6.5	96.8
4	2	2.1	2.2	98.9
5	1	1.1	1.1	100.0
0	2	2.1	Missing	100.0
Total	95	100.0	100.0	
Valid Cases: 93			Missing Cases: 2	

Q41. SUBORDINATE'S RESPECT

Code	Absolute Frequency	Relative Frequency (Percent)	Adjusted Frequency (Percent)	Cumulative Frequency (Percent)
1	38	40.0	40.9	40.9
2	33	34.7	35.5	76.3
3	12	12.6	12.9	89.2
4	8	8.4	8.6	97.8
5	2	2.1	2.2	100.0
0	2	2.1	Missing	100.0
Total	95	100.0	100.0	
Valid Cases: 93			Missing Cases: 2	

Q42. OUTSIDE PEER'S RESPECT

Code	Absolute Frequency	Relative Frequency (Percent)	Adjusted Frequency (Percent)	Cumulative Frequency (Percent)
1	11	11.6	12.0	12.0
2	30	31.6	32.6	44.6
3	31	32.6	33.7	78.3
4	15	15.8	16.3	94.6
5	5	5.3	5.4	100.0
0	3	3.2	Missing	100.0
Total	95	100.0	100.0	
Valid Cases: 92			Missing Cases: 3	

Q43. KNOW PEOPLE IN GENERAL

Code	Absolute Frequency	Relative Frequency (Percent)	Adjusted Frequency (Percent)	Cumulative Frequency (Percent)
1	57	60.0	61.3	61.3
2	32	33.7	34.4	95.7
3	3	3.2	3.2	98.9
4	1	1.1	1.1	100.0
0	2	2.1	Missing	100.0
Total	95	100.0	100.0	
Valid Cases: 93			Missing Cases: 2	

Q44. KNOW USE OF POWER

Code	Absolute Frequency	Relative Frequency (Percent)	Adjusted Frequency (Percent)	Cumulative Frequency (Percent)
1	54	56.8	58.1	58.1
2	28	29.5	30.1	88.2
3	10	10.5	10.8	98.9
5	1	1.1	1.1	100.0
0	2	2.1	Missing	100.0
Total	95	100.0	100.0	
Valid Cases: 93			Missing Cases: 2	

Q45. WILLING TO SHARE KNOWLEDGE

Code	Absolute Frequency	Relative Frequency (Percent)	Adjusted Frequency (Percent)	Cumulative Frequency (Percent)
1	63	66.3	67.7	67.7
2	24	25.3	25.8	93.5
3	6	6.3	6.5	100.0
0	2	2.1	Missing	100.0
Total	95	100.0	100.0	
Valid Cases: 93			Missing Cases: 2	

Q46. WILLING TO COUNSEL

Code	Absolute Frequency	Relative Frequency (Percent)	Adjusted Frequency (Percent)	Cumulative Frequency (Percent)
1	65	68.4	69.9	69.9
2	23	24.2	24.7	94.6
3	3	3.2	3.2	97.8
4	2	2.1	2.2	100.0
0	2	2.1	Missing	100.0
Total	95	100.0	100.0	
Valid Cases: 93			Missing Cases: 2	

Q49. AGE

Code	Absolute Frequency	Relative Frequency (Percent)	Adjusted Frequency (Percent)	Cumulative Frequency (Percent)
20	1	1.1	1.1	1.1
21	28	29.5	29.5	30.5
22	29	30.5	30.5	61.1
23	22	23.2	23.2	84.2
24	4	4.2	4.2	88.4
25	4	4.2	4.2	92.6
26	3	3.2	3.2	95.8
29	1	1.1	1.1	96.8
32	2	2.1	2.1	98.9
33	1	1.1	1.1	100.0
Total	95	100.0	100.0	
Valid Cases: 95		Missing Cases: 0		

Q50. COMMISSION SOURCE

Code	Absolute Frequency	Relative Frequency (Percent)	Adjusted Frequency (Percent)	Cumulative Frequency (Percent)
1	14	14.7	14.7	14.7
2	55	57.9	57.9	72.6
3	26	27.4	27.4	100.0
Total	95	100.0	100.0	
Valid Cases: 95		Missing Cases: 0		

Q51. HIGHEST EDUCATION

Code	Absolute Frequency	Relative Frequency (Percent)	Adjusted Frequency (Percent)	Cumulative Frequency (Percent)
3	5	5.3	5.3	5.3
4	2	2.1	2.1	7.4
5	88	92.6	92.6	100.0
Total	95	100.0	100.0	
Valid Cases: 95			Missing Cases: 0	

Q52. FATHER'S OCCUPATION

Code	Absolute Frequency	Relative Frequency (Percent)	Adjusted Frequency (Percent)	Cumulative Frequency (Percent)
1	6	6.3	6.5	6.5
2	1	1.1	1.1	7.5
3	5	5.3	5.4	12.9
4	81	85.3	87.1	100.0
0	2	2.1	Missing	100.0
Total	95	100.0	100.0	
Valid Cases: 93			Missing Cases: 2	

Q53. CAREER PLAN

Code	Absolute Frequency	Relative Frequency (Percent)	Adjusted Frequency (Percent)	Cumulative Frequency (Percent)
1	71	74.7	76.3	76.3
2	21	22.1	22.6	98.9
4	1	1.1	1.1	100.0
0	2	2.1	Missing	100.0
Total	95	100.0	100.0	

Valid Cases: 93

Missing Cases: 2

Q54. MAJOR COMMAND

Code	Absolute Frequency	Relative Frequency (Percent)	Adjusted Frequency (Percent)	Cumulative Frequency (Percent)
1	2	2.1	2.1	2.1
2	2	2.1	2.1	4.3
3	7	7.4	7.4	11.7
4	3	3.2	3.2	14.9
5	11	11.6	11.7	26.6
6	20	21.1	21.3	47.9
7	15	15.8	16.0	63.8
8	34	35.8	36.2	100.0
0	1	1.1	Missing	100.0
Total	95	100.0	100.0	

Valid Cases: 94

Missing Cases: 1

Q55. BPZ PROMOTIONS

Code	Absolute Frequency	Relative Frequency (Percent)	Adjusted Frequency (Percent)	Cumulative Frequency (Percent)
1	42	37.8	37.8	37.8
2	28	25.2	25.2	64.2
3	29	26.1	26.1	89.2
4	12	10.8	10.8	100.0
Total	111	100.0	100.0	
Valid Cases: 95		Missing Cases: 0		

Q56. CAREER PROGRESS SATISFACTION

Code	Absolute Frequency	Relative Frequency (Percent)	Adjusted Frequency (Percent)	Cumulative Frequency (Percent)
1	39	41.1	41.1	41.1
2	48	50.5	50.5	91.6
3	8	8.4	8.4	100.0
Total	95	100.0	100.0	
Valid Cases: 95		Missing Cases: 0		

Q58. JOB SATISFACTION

Code	Absolute Frequency	Relative Frequency (Percent)	Adjusted Frequency (Percent)	Cumulative Frequency (Percent)
1	14	14.7	15.1	15.1
2	51	53.7	54.8	69.9
3	20	21.1	21.5	91.4
4	5	5.3	5.4	96.8
5	3	3.2	3.2	100.0
0	2	2.1	Missing	100.0
Total	95	100.0	100.0	
Valid Cases: 93			Missing Cases: 2	

Appendix C: Summary of Responses by Hypothesis

HYPOTHESIS 1

The mentoring phenomenon, as defined in the introduction of this text, is as prevalent in the Air Force as it is in private industry (63.5 percent).

RESULTS:

Percentage Reporting Mentors - 61.1 percent

Therefore: By dividing the respondents into two groups, either had a mentor or did not have a mentor, one can assume a normal approximation to the binomial distribution of the 63.5 percent mentoring rate found by Roche. When comparing that to the 61.1 percent mentoring rate for this study, at a significance level of 0.01, one fails to reject the null hypothesis and concludes that mentoring exists in the same proportions in the Air Force as it does in private industry.

HYPOTHESIS 2

All officers, regardless of military background, are equally likely to have a mentor.

RESULTS:

Based on discriminant analysis of the data collected from questions 53 and 54, one fails to reject the null hypothesis at the 0.05 level of significance and concludes that all officers, regardless of military background, are equally likely to have a mentor. The formulation of a career plan was not a discriminator between mentored and unmentored officers ($p < .63$) and command identity emerged as a marginally significant discriminator ($p < .07$).

HYPOTHESIS 3

Mentored officers are no more likely to be promoted early than unmentored officers.

RESULTS:

Through interpretation of the pooled variance estimates obtained by performing a T-test, fail to reject the null hypothesis at the 0.05 level of significance and conclude that mentored officers are no more likely to be promoted early than unmentored officers.

T-statistic	d.f.	Critical t-value	P-value
0.08	93	1.66	0.93

HYPOTHESIS 4

None of the roles of the mentor as enumerated by Lea and Liebowitz are functions practiced by mentors in the Air Force.

RESULTS:

Using statistical formulas (Z-Statistics) to compute the normal approximation of the binomial distribution, at a significance level of 0.05, reject the null hypothesis and conclude that all of the roles of the mentor as enumerated by Lea and Liebowitz--teacher, guide, advisor, counselor, supporter, communicator, motivator, protector, sponsor, and role model--are functions used by mentors in the Air Force ($p < .001$).

HYPOTHESIS 5

Mentored officers perceive that being mentored had no more influence on their own careers than they, as mentors, have on the careers of their protege.

RESULTS:

Assuming a normal approximation to the binomial distribution, and comparison of the computed Z-Statistic values for each separate case, reject the null hypothesis at the 0.05 level of significance and conclude that the respondents perceived their mentors as having significant influence on their careers ($p < .001$). Likewise, for those who are now mentors, and at the 0.05 level of significance, the perception is that of having even greater influence on the career of their protege ($p < .001$). Furthermore, a comparison of the perceived mentor influence on one's own career, and the perceived mentor influence on the career of one's protege reveals a significant difference using a T-test of the difference of the means ($t = 2.26$; $p < .03$). In this case, one rejects the null hypothesis, and concludes that there is a significant difference in the degree of influence exerted by one's previous mentor and the amount of influence one exerts over his protege.

HYPOTHESIS 6

Officers who are mentors are likely to be no more satisfied with their job than those who are not mentors.

RESULTS:

Interpretation of the pooled variance estimates obtained via a T-test, at the 0.05 level of significance, reject the null hypothesis and conclude that officers who are mentors are likely to be more satisfied with their job than those who are not mentors.

T-statistic	d.f.	Critical t-value	P-value
-2.25	93	±1.66	0.027

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VITA

Captain Francis Lewandowski was born on 16 August 1950 in Liverpool, England. He graduated from Woodrow Wilson High School in Washington DC in 1969 and enlisted in the U.S. Air Force in September of the same year. Honorably discharged in 1973, he attended the University of Southern Maine from which he received a Bachelor of Science in Marine Biology in June 1977. In February of 1979, Capt Lewandowski attended the Officer Training School at Lackland AFB, Texas. Upon graduation and commissioning, he completed the Aircraft Maintenance Course at Chanute AFB, Illinois and was subsequently assigned to Pease AFB, New Hampshire as an aircraft maintenance officer. From November 1979 to November 1981 Capt Lewandowski served as OIC of Tanker Branch, OIC of Bomber Branch, and Maintenance Supervisor for the 509th Organizational Maintenance Squadron.

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Mentoring is defined as a relationship between a senior member and a junior member of an organization in which the senior member is influential in molding and shaping the career of the younger member. Recent articles have focused on conceptualizing the mentoring phenomenon and examining how it effects the individual and the organization.

This ^{thesis} project found that nearly two-thirds (61.1 percent) of those surveyed (112 Air War College designees) reported having been involved in a mentor-protégé relationship at some point in their career. While this research found that individuals who had mentors were no more likely to be promoted ahead of their unmentored counterparts, it did conclude that officers assuming the role of mentor were significantly more satisfied with their job than those who had not assumed the mentoring role. Additionally, protégés perceive their mentors as having significant influence on their careers.

The most important roles played by the mentor, from the protégé's perspective, are those of role model and sponsor. ~~On the other hand, the most important roles played by the mentor, in the eyes of the mentor,~~ are those of advisor and teacher. Still others, who did not have a mentor, perceived the mentoring process in negative terms whereby "undeserving" officers who are sponsored or protected by a mentor received choice assignments over more deserving candidates.

In summary, Air Force and private sector mentoring work in much the same way. Mentoring accelerates the learning of the technical, human, conceptual, and diagnostic skills, required of today's junior officers through interpersonal relationships with more experienced senior managers. ↗